City of Austin
Residential New Construction and Addition Permit Application

Residential Review, 2nd floor, One Texas Center
505 Barton Springs, Austin, TX 78704 (512) 978-4000

Property Information

Project Address: 3701 Westlake Dr.	Tax Parcel ID: 123437 and 123438
Legal Description: 3701: N 29.4' of Lot 87 & S 70.6 FRNTG Rd of Lot 88 & 2X8.11 Water Well St Lake Shore Addn. 3509: LOT 2 BUELL-RUDE SUBD.	
Zoning District: LA	Lot Area (sq ft): 59,470
Neighborhood Plan Area (if applicable): N/A	Historic District (if applicable): N/A

Required Reviews

Is project participating in S.M.A.R.T. Housing? ○Y ●N (If yes, attach signed certification letter from NHCD, and signed conditional approval letter from Austin Energy Green Building)	Does project have a Green Building requirement? ○Y ●N (If yes, attach signed conditional approval letter from Austin Energy Green Building)
Is this site within an Airport Overlay Zone? ○Y ●N (If yes, approval through Aviation is required)	Does this site have a septic system? ✓Y ( )N (If yes, submit a copy of approved septic permit)

Does the structure exceed 3,600 square feet total under roof? ●Y ○N (If yes, Fire review is required)
Is this property within 200 feet of a hazardous pipeline? ○Y ●N (If yes, Fire review is required)

Is this site located within an Erosion Hazard Zone? ○Y ●N (If yes, EHZ review is required)	Is this property within 150 feet of the 100 year floodplain? ●Y ○N (Proximity to floodplain may require additional review time.)

Is there a protected sized tree on this lot or adjacent lot(s)? ●Y ○N (If yes, application for a tree permit with the City Arborist is required) SEE APPROVED TREE PERMIT
Note: Include tree location(s) on plot plan.

Is this site within the Residential Design and Compatibility Standards Ordinance Boundary Area? (LDC 25-2 Subchapter F) ○Y ●N

Does this site currently have: water availability? ●Y ○N wastewater availability? ●Y ○N (If no, contact Austin Water Utility to apply for water/wastewater taps and/or service extension request.)

Are there existing water/wastewater infrastructure, appurtenances or existing water/wastewater easements located on site? ○Y ●N
(If yes, contact Austin Water Utility Pipeline Engineering for review and approval)

Does this site have or will it have an auxiliary water source? ○Y ●N (If yes, submit approved auxiliary and potable plumbing plans.)
(Auxiliary water supplies are wells, rainwater harvesting, river water, lake water, reclaimed water, etc.)

Does this site require a cut or fill in excess of four (4) feet? ○Y ●N (If yes, contact the Development Assistance Center for a Site Plan Exemption)

Is this site within the Waterfront Overlay? ○Y ●N (LDC 25-2 Subchapter C Article 3)	Is this site within the Lake Austin Overlay? ●Y ○N (LDC 25-2-180, 25-2-647)
Does this site front a paved street? ●Y ○N (If no, contact Development Assistance Center for Site Plan requirements.)	Is this site adjacent to a paved alley? ○Y ●N (Public Works approval required to take access from a public alley.)

Does this site have a Board of Adjustment (BOA) variance? ○Y ●N Case # _____ (if applicable)
Does this site have a Residential Design and Compatibility Commission (RDCC) waiver? ○Y ●N
(If yes, provide a copy of decision sheet. Note: A permit cannot be approved within 10 days of approval of a variance from BOA.)

Description of Work

Existing Use: ●vacant ○single-family residential ○duplex residential ○two-family residential ○other: _____

Proposed Use: ○vacant ●single-family residential ○duplex residential ○two-family residential ○other: _____

Project Type: ●new construction ○addition ○addition/remodel ○other: _____

Will all or part of an existing exterior wall, structure, or roof be removed as part of the project? ○Y ●N
(Note: Removal of all or part of a structure requires a demolition permit application.)

# of existing bedrooms: 0	# of bedrooms upon completion: 7	# of baths existing: 0	# of baths upon completion: 13

Project Description: (Note: Please provide thorough description of project. Attach additional pages as necessary.)
Please see separate page for project description.

Trades Permits Required (Circle as applicable): electric plumbing mechanical (HVAC) concrete (R.O.W.)

Job Valuation

Total Job Valuation:	Amount of Total Job Valuation dedicated to all Addition and/or New Construction:	Amount of Total Job Valuation dedicated to all Remodel/Repair:
$ 19 MILLION Note: The total job valuation should be the sum total of all valuations noted to the right. Labor and materials only, rounded to nearest dollar. Permit fees are based on adopted fee schedule.	$ 19 MILLION Amount for Primary Structure: $ _____ Elec: Y ☐N | Plmbg: Y ☐N | Mech: ☐N Amount for Accessory Structure: $ _____ Elec: ☐Y ☐N | Plmbg: ☐Y ☐N | Mech: ☐Y ☐N	Bldg: $ _____ Elec: $ _____ Plmbg: $ _____ Mech: $ _____ TOTAL: $ 0

Please utilize the Calculation Aid on the last page of the Additional Information, page 7, as a guide to complete the following calculations and to provide supplemental information for thorough review.

Site Development Information

Area Description Note: Provide a separate calculation for each distinct area. Attach additional sheets as necessary. Measurements are to the outside surface of the exterior wall.	Existing Sq Ft		New/Added Sq Ft		Total Sq Ft	
	Bldg 1	Bldg 2	Bldg 1	Bldg 2	Bldg 1	Bldg 2
a) 1st Floor conditioned area			7926		7926	0.00
b) 2nd Floor conditioned area			7433		7433	0.00
c) 3rd Floor conditioned area			6161		6161	0.00
d) Basement			7120		7120	0.00
e) Covered parking (garage or carport)					0.00	0.00
f) Covered patio, deck, porch, and/or balcony area(s)			3659		3659	0.00
g) Other covered or roofed area			359		359	0.00
h) Uncovered wood decks					0.00	0.00
Total Building Area (total a through h)	0.00	0.00	0.00	0.00	0.00	0.00
i) Pool			1447		1447	0.00
j) Spa					0.00	0.00

Building Coverage Information

Note: Building Coverage means the area of a lot covered by buildings or roofed areas, but excludes ground-level paving, landscaping, open recreational facilities, incidental projecting eaves, balconies, and similar features. Pools, ponds, and fountains are not included in this measurement. (LDC 25-1-21)

Total Building Coverage (sq ft): 9571 % of lot size: 16.09%

Impervious Cover Information

Note: Impervious cover is the total horizontal area of covered spaces, paved areas, walkways, and driveways. The term excludes pools, ponds, fountains, and areas with gravel placed over pervious surfaces that are used only for landscaping or by pedestrians. For an uncovered wood deck that has drainage spaces between the deck boards and that is located over a pervious surface, 50 percent of the horizontal area of the deck is included in the measurement of impervious cover. (LDC 25-1-23)

Total Impervious Cover (sq ft): 16236 % of lot size: 27.30%

Setbacks

Are any existing structures on this site a non-compliant structure based on a yard setback requirement? ○Y ●N
(LDC 25-2-492)

Does any structure (or an element of a structure) extend over or beyond a required yard? (LDC 25-2-513) ○Y ●N
Is front yard setback averaging being utilized on this property? (LDC 25-2, Subchapter F, Sec. 2.3 or 25-2-778) ○Y ●N

Height Information (LDC 25-1-21 or 25-2 Subchapter F, Section 3.4)

Building Height: 34 ft 6 in Number of Floors: 4

Parking (LDC 25-6 Appendix A & 25-6-478)

# of spaces required: 2 # of spaces provided: 2

Right-of-Way Information

Is a sidewalk required for the proposed construction? (LDC 25-6-353) ●Y ○N
*Sidewalks are to be installed on any new construction of a single family, two-family or duplex residential structure and any addition to an existing building that increases the building's gross floor area by 50 % or more.

Will a Type I driveway approach be installed, relocated, removed or repaired as part of this project? ●Y ○N

Width of approach (measured at property line): 22.5 ft Distance from intersection (for corner lots only): N/A ft

Are storm sewer inlets located along the property or within ten (10) feet of the boundaries of the property? ○Y ●N
(If yes, drainage review is required)

Subchapter F

Gross Floor Area

This section is only required for projects located within the Residential Design and Compatibility Standards Ordinance Boundaries as defined and illustrated in Title 25-2 Subchapter F of the Land Development Code. The Gross Floor Area of each floor is measured as the area contained within the outside edge of the exterior walls.

		Existing Sq Ft	New/Added Sq Ft	Proposed Exemption (check article utilized)	Applied Exemption Sq Ft	Total Sq Ft
1st Floor						0.00
2nd Floor						0.00
3rd Floor						0.00
Area w/ ceilings > 15'				Must follow article 3.3.5		0.00
Ground Floor Porch* (check article utilized)				☐ Full Porch sq ft (3.3.3 A) ☐ 200 sq ft (3.3.3 A 2)		0.00
Basement				Must follow article 3.3.3B, see note below		0.00
Attic				Must follow article 3.3.3C, see note below		0.00
Garage**: (check article utilized)	Attached			☐ 200 sq ft (3.3.2 B 2b)		0.00
	Detached			☐ 450 sq ft (3.3.2 A 1 / 2a) ☐ 200 sq ft (3.3.2 B 2a)		0.00
Carport**: (check article utilized)	Attached			☐ 450 sq ft (3.3.2 A 3) ☐ 200 sq ft (3.3.2 B 1)***		0.00
	Detached			☐ 450 sq ft (3.3.2 A 1)		0.00
Accessory Building(s) (detached)						0.00
Totals		0.00	0.00			0.00

TOTAL GROSS FLOOR AREA (add Total Sq Ft column) 0.00

(Total Gross Floor Area ÷ Lot Area) x 100 = _____ Floor-To-Area Ratio (FAR)

Is a sidewall articulation required for this project? ◯Y ◯N

(Yes, if: a wall, 15' tall or higher, within 9 feet of a side property line extends further than 36 feet in length per article 2.7.1)

Does any portion of the structure extend beyond a setback plane/exemption exhibit (aka "tent")? ◯Y ◯N

(If Yes, indicate applicable section of Subchapter F and length of protrusion on the drawings.)

***Ground Floor Porch exemption:** A ground floor porch, including a screened porch, may be exempted, provided that the porch is not accessible by automobile and is not connected to a driveway; and the exemption may not exceed 200 square feet if a porch has habitable space or a balcony above it.

****Garage and carport exemptions (in relation to primary structure):** Exemptions must follow the code as outlined in Title 25-2 Subchapter F 3.3.2. Each amount listed (450 or 200) is the maximum exclusion allowed per the article designated. Note: Article 3.3.2 C, "An applicant may receive only one 450-square foot exemption per site under paragraph A. An applicant who receives a 450-square foot exemption may receive an additional 200-foot exemption for the same site under paragraph B, but only for an attached parking area used to meet minimum parking requirements."

*****Ordinance article 3.3.2 B 1 is the only 200 sq ft exemption that may be combined with a 450 sq ft exemption. Otherwise only one 450 exemption or one 200 sq ft exemption may be taken.

Basement exemption: A habitable portion of a building that is below grade may be exempted if the habitable portion does not extend beyond the first-story footprint and is below natural or finished grade, whichever is lower; and it is surrounded by natural grade for at least 50% of its perimeter wall area and the finished floor of the first story is not more than three feet above the average elevation at the intersections of the minimum front yard setback line and the side property lines.

Habitable Attic exemption: A habitable portion of an attic may be exempted if: 1) The roof above it is not a flat or mansard roof and has a slope of 3 to 12 or greater; 2) It is fully contained within the roof structure; 3) It has only one floor; 4) It does not extend beyond the footprint of the floors below; 5) It is the highest habitable portion of the building, or a section of the building, and adds no additional mass to the structure; and 6) Fifty percent or more of the area has a ceiling height of seven feet or less.

Contact Information			
Owner	Bryan & Sharoll Sheffield	Applicant/Agent	Mindy Briggs. Permit Partners
Mailing Address	PO Box 1563. Austin 78746	Mailing Address	105 W. Riverside Dr. 78704
Phone		Phone	512-593-5361
Email		Email	mindy@permit-partners.com
General Contractor	DALGLEISH CONSTRUCTION	Design Professional	Rhotenberry Wellen Architects
Mailing Address	9019 Spice WOOD SPRINGS RD	Mailing Address	1102 W. Texas Ave,Midland,79701
Phone	512.346.8554 78759	Phone	(432) 682-1252
Email	NICK@DALGLEISH.NET	Email	cale@rwarchitects.com

Authorization

BP I understand that in accordance with Sections 25-1-111 and 25-11-66 of the Land Development Code (LDC), non-compliance with the LDC may be cause for the Building Official to suspend or revoke a permit and/or license.

BP I acknowledge that this project qualifies for the Site Plan Exemption as listed in Section 25-5-2 of the LDC. I understand that nothing may be built upon or over an easement.

BP I further understand that no portion of any roof structure may overhang in any public utility or drainage easement. I acknowledge that customer will bear the expense of any necessary relocation of existing utilities to clear this driveway location and/or the cost to repair any damage to existing utilities caused during construction. Water services, meters, and wastewater cleanouts are not permitted within or beneath driveways or sidewalks. Private plumbing appurtenances will not be located in public right-of-way or public easements. Private plumbing lines will not cross lot lines.

BP **I agree that this application will expire on the 181st day after the date that the application is filed if the application is not approved and an extension is not granted. If the application expires, a new submittal will be required and compliance with current code may be required.**

BP I hereby certify that to the best of my knowledge and ability, the information provided in this application is complete and accurate.

BP I further acknowledge that, should any information contained herein prove incorrect, the building official may suspend or revoke any resulting permit and/or license.

BP I also understand that if there are any trees greater than 19 inches in diameter located on the property and immediately adjacent to the site, I am required to complete a Tree Ordinance Review Application by contacting (512) 974-1876 or cityarborist@austintexas.gov. This initiates the tree permitting requirement needed to proceed with the development review process.

BP I also understand that if there is a septic system located on the property, I am required to complete an On-site Sewage Facility (a.k.a. an OSSF or septic system) application by contacting Austin Water at (512) 972-0050 or ossf@austintexas.gov. This initiates the septic system permitting requirement needed to proceed with the development review process.

BP Erosion and Sedimentation Controls are required per Section 25-8-181 of the LDC. **Failure to comply with this requirement may result in a Stop Work Order and/or legal action by the City of Austin including criminal charges and fines of up to $2,000.00 per day.**

BP I acknowledge that a sidewalk will be required on any new construction of a single family, two-family or duplex residential structure and any addition to an existing building that increases the building's gross floor area by 50 % or more.

BP I acknowledge if my plans are subject to a technical review it will not be construed to be a permit for, or an approval of any violation of any of the provisions of the current adopted building codes or another ordinance of the City of Austin.

BP I am the record owner of this property and authorize the agent/applicant listed above to apply for and acquire a permit on my behalf.

Applicant's signature: _____ Date: 4/25/15

OWNER'S signature: _____ Date: 4-25-16

Design Professional's signature: _____ Date: 4.25.16

General Contractor's signature: Date:

One Stop Shop
505 Barton Springs Rd
(512) 974-2632 – phone
(512) 974-9112 – phone
(512) 974-9109 – fax
(512) 974-9779 – fax

Austin Energy
Building Service Planning Application (BSPA)

This form to be used for review of Building Permit only

Responsible Person for Service Request: Mindy Briggs

Email: mindy@permit-partners.com Fax: _____ Phone: 512-593-5361

☑ Residential ☐ Commercial ☑ New Construction ☐ Remodeling

Project Address: 3701 Westlake Dr. **OR**

Legal Description: _____ Lot: _____ Block: _____

Who is your electrical provider? ☑ AE ☐ Other _____

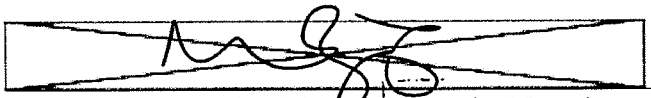
☑ Overhead Service ☐ Underground Service ☑ Single-phase (1Ø) ☐ Three-phase (3Ø)

Location of meter: _____

Number of existing meters on gutter _____ (show all existing meters on riser diagram)

Expired permit # _____

Comments: Construction of new 2-story 32,658sf single-family residence with basement level and pool.



4/22/16 512-593-5361

ESPA Completed by (Signature & Print Name) Date Phone

_____ Approved ☐ Yes ☐ No _____

AE Representative Date Phone

All structures must maintain 7'6" clearance from AE energized distribution power lines. Application by AE and NESC codes-this review DOES NOT include transmission power lines.

Application expires 180 days after the date of approval
(Any changes to the above information requires a new ESPA)

AE APPROVED
APR 22 2016
113-345
DRB

Revised 2/14/2012

Austin WATER

Water & Wastewater Service Plan Verification (WWWSPV)

Service Address: 3701 Westlake Dr.

Lot: _____ Block: _____ Subdivision: _____

Existing Use: vacant

Proposed Use: Single-Family Res. Two-Family Res. Duplex Mobile Home Secondary Apt. Cottage Urban Home

Guest House Accessory Dwelling Accessory Apt. Other _____

Existing # Baths 0 Additional # Baths 13 Total number of bathrooms the meter will serve 13

Text

Mindy Briggs, Permit Partners — 4/25/16 — 512-593-5361

Applicant's Name & Title **Date** **Phone**

City of Austin Office Use

Water main size_____ Service stub size_____ Service stub upgrade required: Y N

Shared Dual Service? Y N If yes, state meter size(s) on shared service _____

Existing meter #_____ Existing meter size_____

Existing water service line/meter location_____

Upgrade required: Y N New meter(s) size_____

WW main size_____ WW Service line/clean-out location_____

REVIEWED

APR 25 2016

AUSTIN WATER UTILITY
CONSUMER SERVICE DIVISION - TAPS

Secondary address needed at property: Y N

AWU Pipeline Engineering approval required: Y N

Utility Tap Plan required: Y N

Comments: Not City of Austin water/ww -
No SPV needed

AWU Engineer Representative — Date — Phone

AWU Taps Representative — 4/25/16 — Date — Phone

Water meters & wastewater clean-outs are not permitted in sidewalks or driveways.

Relocation of services to remove them from proposed sidewalks or driveways shall be performed at the applicant's expense.

If the existing water meter was pulled for non-billing account during demolition contact Customer Care at 512-494-9400 to have account set up and the same size meter reinstalled within 120 days of meter removal (with active building permit) to avoid city re-connect charges being applied.

rwa
rhotenberry
wellen
architects

April 25, 2016

Re: 3701 Westlake Drive
Austin, TX 78746
Project Description

1102 West Texas Avenue
Midland, Texas 79701
432.682.1252
432.682.1257 fax

RWArchitects.com

- The project located at 3701 Westlake Dr. will be a single family residence located within the Lake Austin Overlay District.
- All structures to be built will comply with all applicable City of Austin residential building codes and the Lake Austin zoning district.
- The scope of work consists of a 28,640sf, single-family residence with a Basement, First Floor, Second Floor, and Third Floor and three, 2-car garages. Also to be constructed is 308sf uninhabitable Auxiliary Building which will contain building support systems.
- There will also be a 1447sf in-ground pool as well as a 330sf reflecting pool at the front of the property.
- A boat dock will also be constructed along the shoreline of Lake Austin. This structure will be submitted for permit and constructed separately from the single-family residence and at a later date still to be determined.

Sincerely,

Mark T. Wellen, FAIA

MTW:bv

2015-074404 TP

ROW I.D. 11443840

Mapsco Pg 554E

Tree Ordinance Review Application

Planning and Development Review Department
One Texas Center, 505 Barton Springs Road, 4th floor, Austin, TX 78704
Phone: (512) 974-1876 Fax: (512) 974-3010
Email: cityarborist@austintexas.gov Website: www.austintexas.gov/department/city-arborist

Application request* (specify all that apply):

- ☐ Tree removal (LDC 25-8-602[3])
- ☒ Critical Root Zone impacts (ECM 3.5.2 A)
- ☐ Live canopy impacts of more than 25% (ECM 3.5.2 B)

* Refer to Land Development Code (LDC) 25-8 (B)(1) and Environmental Criteria Manual (ECM) (Section 3 & App. F). Applicant understands that all impacts may threaten the health of the tree and that approval of this application does not guarantee favorable tree results.

Address and zip code of property: 3701 WESTLAKE DR. AUSTIN TX 78746

Name of owner or authorized agent: BARTLETT TREE EXPERTS NICHOLAS CROWTHER

Building permit number (if applicable): _____

Telephone #: 512.450.2332 Fax #: 512.310.8074 E-mail: _____

Tree Species: LIVE OAK (6) LIVE OAK (30) Tree location on lot: REFER TO ATTACHED SITE MAP

Trunk size (in inches) at 4 ½ feet above ground: circumference (around) _____ or diameter (across) (40), (29.5)

General tree condition: ☒ Good / ☐ Fair / ☐ Poor / ☐ Dead

Reason for request: ☒ Development ☐ Tree condition ☐ Other: INSTALLATION OF SEPTIC FIELD.

Nicholas Crowther 11/10/2015

Owner/ Authorized Agent Signature Date

- Proposed development projects are to include a plan view drawing that depicts the location of the tree and the planned improvements (e.g. structure, driveway, utility and irrigation lines).
- This permit application only reviews for compliance with tree regulations.
- The application fee must be paid prior to permit issuance. No fee is required for dead or diseased trees.

Application Determination – To be completed by City Arborist Program Personnel

☐ Approved ☒ KA *Approved With Conditions ☐ Statutory Denial (more information required) ☐ Denied

Comments Build per plan

☒ Heritage Tree(s) ☐ A heritage tree variance is required: ☐ Administrative / ☐ Land Use Commission

Conditions of Approval: ☐ None *or* ☒ As described within Arborist Comments (see above); and

☐ Applicant agrees to plant ____ caliper inches of central Texas native trees (see ECM Appendix F) on the lot prior to obtaining a final inspection (if applicable). Trees are to have a minimum 2-inch trunk diameter. Examples include Oaks, Cedar Elm, Bald Cypress, Desert Willow, Mountain Laurel, Texas Persimmon, Mexican Plum, etc.

☒ Prior to development, applicant agrees to supply a root zone mulch layer and maintain tree protection fencing (chain-link, five-foot in height) throughout the project duration.

☒ No additional impacts are permitted within the ½ Critical Root Zone, including utility trenching.

☐ Provide a receipt from a certified arborist for: ☐remedial root care ☐any required pruning

_____ _____ _____ 11/24/15

Applicant Signature Date City Arborist Signature Date

Post this document on site while any proposed work is in progress.
Conditions for approval of this application must be met within 1 year of the effective date.

v 7/2012

ABBREVIATIONS

∠	ANGLE
℄	CENTER LINE
Ø	DIAMETER or ROUND
<	LESS THAN
>	GREATER THAN
ABV	ABOVE
AC	AIR CONDITIONING
ACCES.	ACCESSORY(IES)
ACOUS	ACOUSTICAL
AD	AREA DRAIN
ADDL	ADDITIONAL
ADJ	ADJUST(ABLE), ADJACENT
AFF	ABOVE FINISHED FLOOR
AHJ	AUTHORITY HAVING JURISDICTION
AL, ALUM	ALUMINUM
ANOD	ANODIZED
AP	ANNUNCIATOR PANEL (FIRE ALARM)
APPR(OX)	APPROXIMATE
ARCH	ARCHITECTURAL
BD	BOARD
BLDG	BUILDING
BLKG	BLOCKING
BM	BEAM
B.O.	BOTTOM OF
BOD	BOTTOM OF DECK
B.O.S.	BOTTOM OF STEEL
BOT, BOTT	BOTTOM
BOW	BOTTOM OF WALL
BRKT	BRACKET
BTWN	BETWEEN
CABT	CABINET
CB	CATCH BASIN
C.G.	CORNER GUARD
CI	CAST IRON
CJ	CONTROL JOINT
CL	CENTER LINE
CLG, CEIL	CEILING
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
CNSK, C-SUNK	COUNTERSUNK(SINK)
CO	CLEAN OUT
COL	COLUMN
CONC.	CONCRETE
CONN	CONNECTION
CONSTR	CONSTRUCTION
CPT	CARPET
CS	CONCRETE-SEALED
CT	CERAMIC TILE
D	DRYER
DEFL	DEFLECTION
DEMO	DEMOLITION
DEPT	DEPARTMENT
DF	DRINKING FOUNTAIN
DIA	DIAMETER
DIAG	DIAGONAL
DIM, DIMS	DIMENSION(S)
DN	DOWN
DR	DOOR
DS	DOWNSPOUT
DTL, DET	DETAIL
DW	DISH WASHER
DWG	DRAWING(S)
E	EAST
EL, ELEV	ELEVATION
EJ	EXPANSION JOINT
ELEC(T)	ELECTRICAL
EP	EXPOSED PAINTED
ELEV	ELEVATOR, ELEVATION
EQ	EQUAL
EQPM, EQUIP	EQUIPMENT
(E)	EXISTING
EXT, EXTER	EXTERIOR
FA	FIRE ALARM
FAS	FIRE ALARM / HORN / STROBE
FD	FLOOR DRAIN
FE	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER CABINET
FF	FINISHED FLOOR
FFL	FINISHED FLOOR LEVEL
FH	FIRE HYDRANT
FIN	FINISH(ED)
FLR	FLOOR
FDN	FOUNDATION

F.O.	FACE OF
FOC	FACE OF CONCRETE
FOF	FACE OF FINISH
FOM	FACE OF MASONRY
FOS	FACE OF STUD
F.P.	FIRE PROOFING
F.R.	FIRE RETARDANT
FRT, FR-S	FIRE TREATED
FT	FOOT (FEET)
FTG	FOOTING
F.V., FV	FIELD VERIFY
GA	GAGE, GAUGE
GALV	GALVANIZED
GYP BD, GB, GWB	GYPSUM BOARD
GFRG	GLASS FIBER REINFORCED GYPSUM
HB	HOSE BIB
HC	HANDICAP
HDWD	HARDWOOD
HM	HOLLOW METAL
HOR(IZ)	HORIZONTAL
HPL	HIGH PRESSURE LAMINATE
HVAC	HEATING, VENTILATING & AIR CONDITIONING
ID	INSIDE DIAMETER, IDENTIFY
IN	INCH(ES)
INFO	INFORMATION
INSUL	INSULATION
INT, INTER	INTERIOR
JAN	JANITOR
JT	JOINT
LAM	LAMINATE
LAV	LAVATORY
LIN	LINOLEUM
LT	LIGHT
MACH.	MACHINE
MAX	MAXIMUM
MECH	MECHANICAL
MANF, MFG	MANUFACTURE(R)(ING)
MIN	MINIMUM
MISC	MISCELLANEOUS
MP	METAL PANEL
MR	MIRROR
MST	MOBILE STORAGE CASEWORK
MTL	METAL
MULL	MULLION
N	NORTH
NIC	NOT IN CONTRACT
NNO.	NOT NORMALLY OCCUPIED
NO	NUMBER
NTS	NOT TO SCALE
O/	OVER
OC	ON CENTER
OD	OUTSIDE DIAMETER
OFCI	OWNER FURNISHED CONTRACTOR INSTALLED
OH, OPH	OPPOSITE HAND
OPP	OPPOSITE
ORD	OVERFLOW ROOF DRAIN
P, PTD	PAINT(ED) or PAPER TOWEL DISPENSER
PJ	PANEL JOINT
PL	PLATE
PLUMB	PLUMBING
PLYWD	PLYWOOD
PNL	PANEL
PR	PAIR
PSI	POUNDS PER SQUARE INCH
PSF	POUNDS PER SQUARE FOOT
PT	POINT, PRESSURE TREATED
PVC	POLYVINYL CHLORIDE

R	RISER
R, RAD	RADIUS
RB	RUBBER BASE
RCP	REFLECTED CEILING PLAN
RD	ROOF DRAIN
REF, REFR	REFRIGERATOR
REINF	REINFORCE(D)(ING)
REQ, REQ'D	REQUIRE(D)(MENTS)
REV	REVISION(S) / REVISED
RM	ROOM
RO	ROUGH OPENING
RWF	RESILIENT WOOD FLOORING
S	SOUTH
SC	SOLID CORE
SECT	SECTION
SEW	SHOWER EYEWASH
SHR	SHOWER
SHT	SHEET
SHTG (SHT'G)	SHEATHING
SIM	SIMILAR
SKYLT	SKYLIGHT
SMS	SELF-TAPPING METAL SCREW
SPECS	SPECIFICATIONS
SS, SST	STAINLESS STEEL
ST	STONE
STC	STAINED CONCRETE, SOUND TRANSMISSION CLASS
STD	STANDARD
STL	STEEL
STOR	STORAGE
STRUC(T)	STRUCTURAL
SQ	SQUARE
SUSP CLG	SUSPENDED CEILING
SYM	SYMMETRICAL
SYS	SYSTEM
T, TLT	TOILET
TR	TREAD
TEL, TELE	TELEPHONE
TELECOM	TELECOMMUNICATIONS
T&G	TONGUE AND GROOVE
T.O.	TOP OF
TOA	TOP OF ASPHALT
TOC	TOP OF CONCRETE, TOP OF CURB
TOD	TOP OF DECK
TOE	TOP OF EXISTING
TOF	TOP OF FLOOR
TOP	TOP OF PLATE OR PARAPET
TOI	TOP OF INSULATION
TOW	TOP OF WALL
TS	TUBE STEEL
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
UON	UNLESS OTHERWISE NOTED
UNS	UNDERSIDE
VCT	VINYL COMPOSITION TILE
VERT	VERTICAL
VEST	VESTIBULE
VT	VINYL TILE
W	WEST
W/	WITH
WB	WOOD BASE
WC	WATER CLOSET, WHEEL CHAIR
WCP	WOOD CEILING PANEL
WCV	WALL COVERING
WD	WOOD
WND	WINDOW
WF	WOOD FLOOR
W/O	WITHOUT
WP	WOOD PANEL, WATERPROOF
WSCT	WAINSCOT

REFERENCE SYMBOLS

- SECTION REFERENCE
- ELEVATION REFERENCE
- DETAIL / ENLARGED PLAN KEY
- DIMENSION TO FACE / CENTER
- ROOM NAME AND NUMBER
- COLUMN GRID
- NEW OR FINISH GRADE / EXISTING GRADE
- KEYNOTE REFERENCE
- PARTITION TYPE
- PROPERTY LINE
- REFERENCE POINT ELEVATION
- MATCH LINE
- 1 HR PARTITION
- 2 HR PARTITION
- 4 HR PARTITION

MATERIAL SYMBOLS

- BLOCKING - CONTINUOUS
- BLOCKING - SHIM
- CERAMIC PANEL (IN SECTION)
- CONCRETE MASONRY UNIT
- CONCRETE IN PLAN
- FIBER CANT - COMPOSITION FILLER
- GLAZING - SMALL SCALE
- GLAZING - LARGE SCALE
- GYP BOARD
- INSULATION - BATT OR BLANKET
- INSULATION - RIGID OR SEMI-RIGID
- PLYWOOD
- SHEATHING
- STEEL
- WOOD - FINISH GRADE / TRIM

IMPERVIOUS COVERAGE

IMPERVIOUS COVERAGE	SF
SITE AREA - 3509 & 3701 (excludes 75' shoreline setback)	59470
EXISTING IMPERVIOUS COVER	
DRIVEWAY(JOINT ACCESS DRIVE)	1934
OTHER FLATWORK (RETAINING WALLS)	295
TOTAL	2229
EXISTING IMPERVIOUS COVER (%)	3.75
IMPERVIOUS COVERAGE (NEW)	
a) 1ST FLOOR CONDITIONED	7926
g1) 1ST FLOOR COVERED PORCH	1286
b) 2ND FLOOR CONDITIONED	7433
g2) 2ND FLOOR COVERED PORCH	783
c) 3RD FLOOR CONDITIONED	6161
g3) 3RD FLOOR COVERED PORCH	1038
d) BASEMENT CONDITIONED	7120
g4) BASEMENT COVERED PORCH	542
e) COVERED PARKING	0
f) COVERED DECK	0
g) COVERED PORCH	see above
h) COVERED PATIO	0
i) BALCONY	0
j) OTHER ROOFED AREA (AUXILIARY BLDG.)	359
TOTAL BUILDING AREA	32658
TOTAL BUILDING COVERAGE (excluding b,g2,c,g3, d,g4. All within the building footprint)	9571
k) DRIVEWAYS	2260
l) SIDEWALKS	386
m) UNCOVERED PATIO	207
n) UNCOVERED DECK	0
o) OTHER FLATWORK (POOL COPING,RE-TAINING WALLS ETC.)	1583
TOTAL SITE COVERAGE	4436
p) POOL	1447
q) SPA	
TOTAL PROPOSED IMPERVIOUS COVER	16236

SITE DEVELOPMENT

Note: Lot 3509 and 3701 will be joined into one lot under a Unified Development Agreement.

MAXIMUM IMPERVIOUS COVERAGE
BOTH LOTS CALCULATED PER CODE SECTION (25-2-551 Sub. C, #3)

3509 WESTLAKE DR. - SITE AREA (excluding 75' shoreline setback): 25860

% SLOPE	AREA		TOTAL
0-15	14428	X35%	5049.8
15-25	7855	X10%	785.5
25-35	3624	X5%	181.2
35-100	153	X0	0
ALLOWABLE IMPERVIOUS COVER			6016

3701 WESTLAKE DR. - SITE AREA (excluding 75' shoreline setback): 33610

% SLOPE	AREA		TOTAL
0-15	30255	X35%	10589.3
15-25	2235	X10%	223.5
25-35	841	X5%	42
35-100	279	X0	0
ALLOWABLE IMPERVIOUS COVER			10854

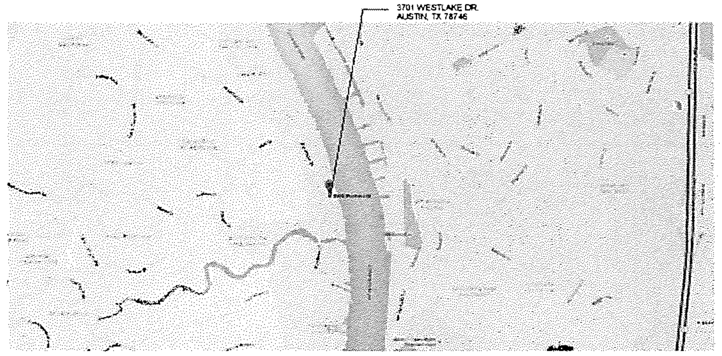
TRANSFERABLE IMPERVIOUS COVER
CALCULATED PER CODE SECTION (25-2-551 Sub. C #3)
PER CODE SECTION (25-2-551 Sub. D)

LOT 892 APACHE SHORES SECTION 2 - SITE AREA: 13329

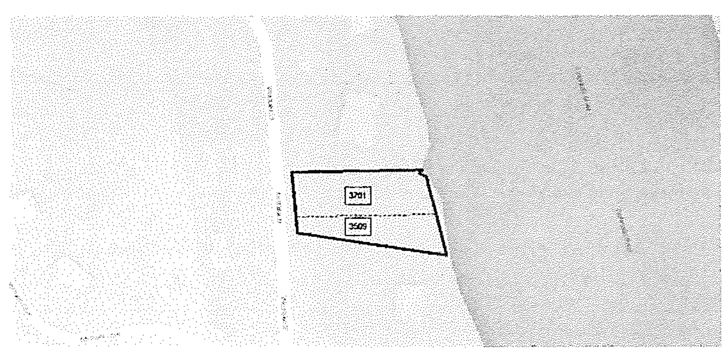
% SLOPE	AREA		TOTAL
0-15	5486	X35%	1920
15-25	2614	X10%	261.4
25-35	2398	X5%	120
35-100	2831	X0	0
TRANSFERABLE IMPERVIOUS COVER			2301

MAXIMUM ALLOWABLE IMPERVIOUS COVER	19151
TOTAL BUILDING COVERAGE	9571
TOTAL BUILDING COVERAGE (% OF LOT SIZE)	16.09%
TOTAL IMPERVIOUS COVERAGE	16234
TOTAL IMPERVIOUS COVERAGE (% OF LOT SIZE)	27.3%

SHEET INDEX



SITE LOCATION MAP



LOT LOCATION MAP

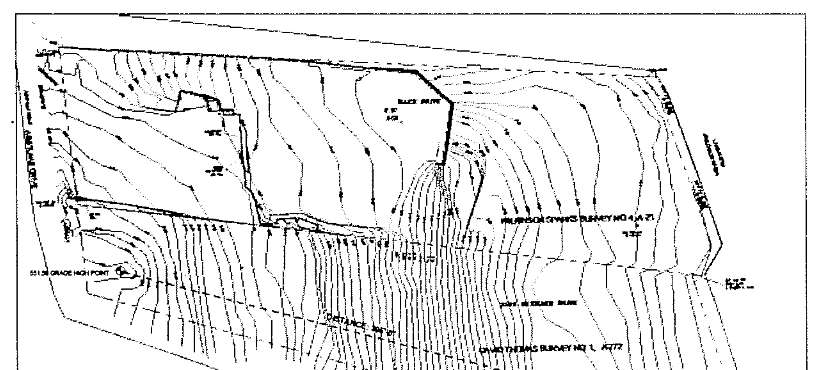
PROJECT TEAM

ARCHITECT
Rhotenberry Wellen Architects
1102 W. Texas Ave
Midland, TX 79701
432-682-1252 p
432-682-1257 f

STRUCTURAL ENGINEER
Architectural Engineers Collaborative
106 E. Sixth St., Suite 450
Austin, TX 78701
512-472-2111

GENERAL CONTRACTOR
Dalgleish Construction
4019 Spicewood Springs Rd.
Austin, TX 78759
512-346-8554

Permit Consultant
Permit Partners
105 W. Riverside Dr. #225
Austin, TX 78704
512-213-0261



SLOPE WAIVER REQUEST FOR EXTERIOR VISITABLE ROUTE

HIGHEST POINT-	551.50'
LOWEST POINT-	494.00'
DISTANCE BETWEEN-	395.00'
SLOPE=	14.5%

1 Slope Waiver Request
1" = 30'-0"

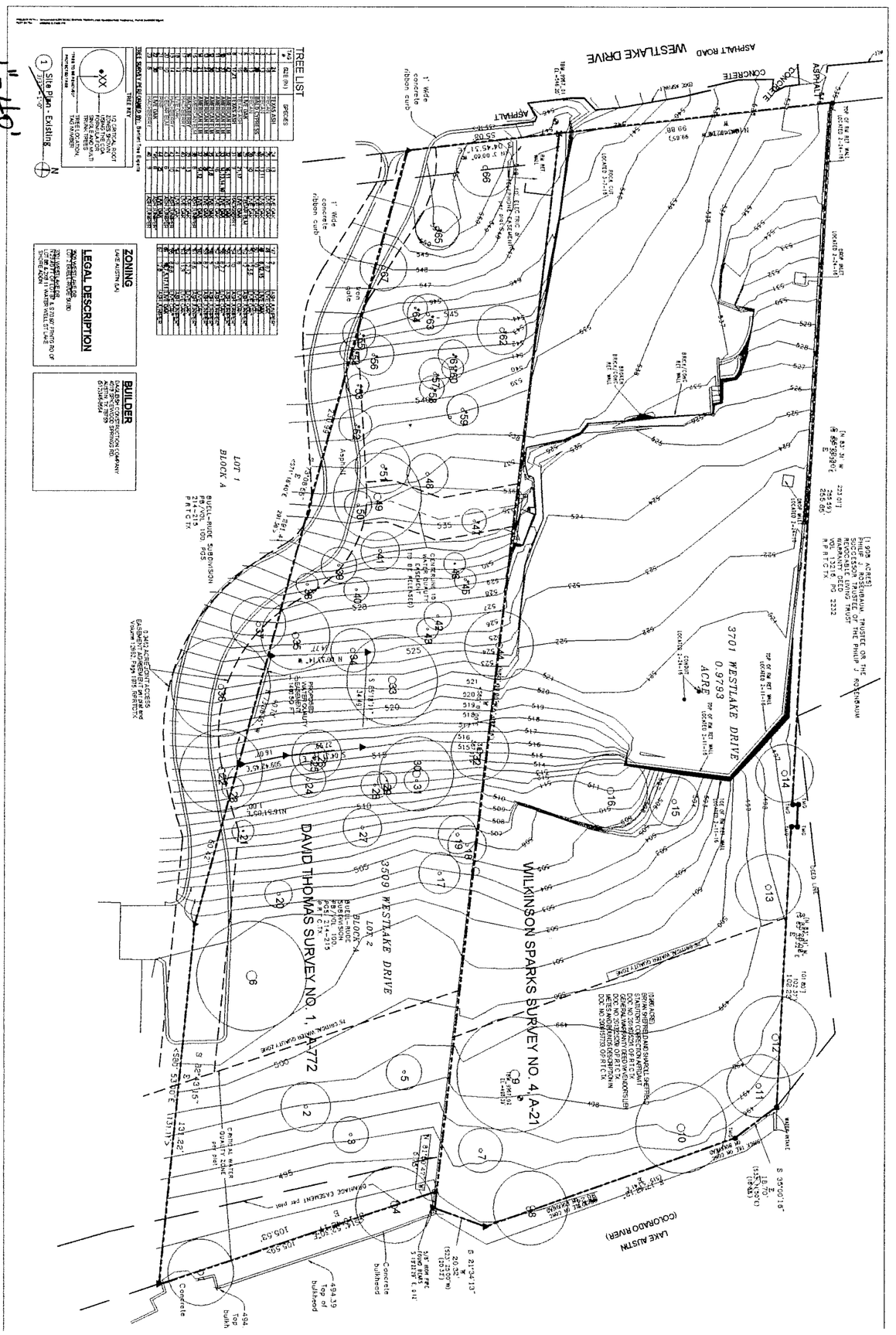
rwa
rhotenberry wellen architects
1102 West Texas Avenue
Midland, Texas 79701
432.682.1252
432.682.1257 fax

04/08/16

NOTE: Sheet is formatted to 30"x48". Scales are 25% of noted when printed on 11x17 paper.

Westlake Residence
3701 Westlake Drive
Austin, TX

JOB NO.	1342
DRAWING TITLE	Basement
REVISIONS	△ △ △ △
DATE	04/07/16
DRAWN BY	NCL
CHECKED BY	MTW
SHEET NO.	



Westlake Residence
3701 Westlake Drive
Austin, TX

NOTE: Sheet is formatted to 30"x48". Scales are 25% of noted when printed on 11x17 paper.

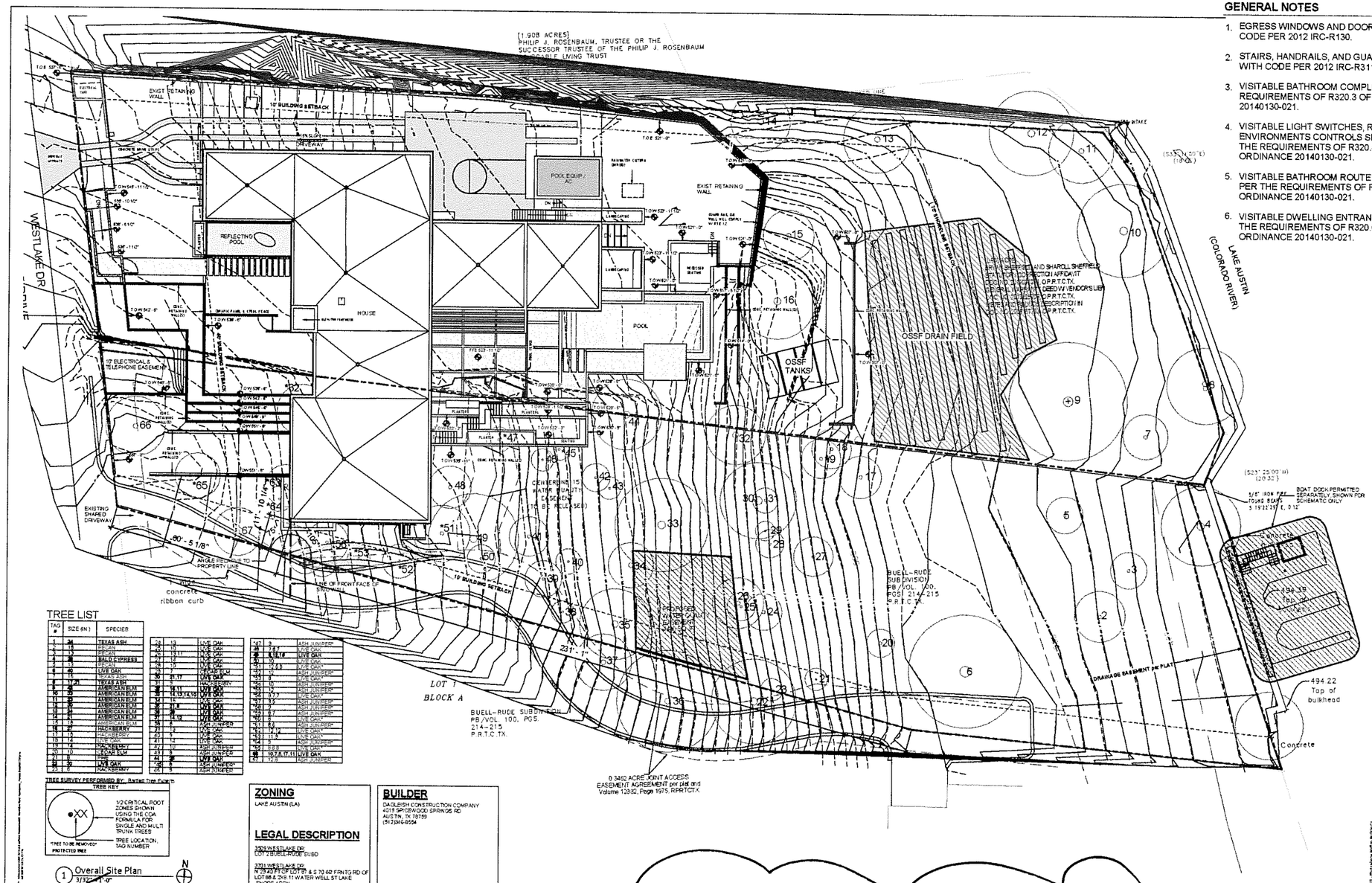
04/08/16

REGISTERED ARCHITECT MARK T. WELLEN 9374 STATE OF TEXAS

rwa rhotenberry wellen architects

1102 West Texas Avenue
Midland, Texas 79701
432 .682 .1252
432 .682 .1257 *fax*

DATE	04/07/16
DRAWN BY	NCL
CHECKED BY	MTW
SHEET NO.	A1
JOB NO.	1342
DRAWING TITLE	Basement
REVISIONS	△ △ △ △



GENERAL NOTES

1. EGRESS WINDOWS AND DOORS TO COMPLY WITH CODE PER 2012 IRC-R130.
2. STAIRS, HANDRAILS, AND GUARDRAILS TO COMPLY WITH CODE PER 2012 IRC-R311 & R312.
3. VISITABLE BATHROOM COMPLIES WITH THE REQUIREMENTS OF R320.3 OF THE COA ORDINANCE 20140130-021.
4. VISITABLE LIGHT SWITCHES, RECEPTACLES, AND ENVIRONMENTS CONTROLS SHALL COMPLY WITH THE REQUIREMENTS OF R320.4 OF THE COA ORDINANCE 20140130-021.
5. VISITABLE BATHROOM ROUTE WILL BE PROVIDED PER THE REQUIREMENTS OF R320.5 OF THE COA ORDINANCE 20140130-021.
6. VISITABLE DWELLING ENTRANCE IS PROVIDED PER THE REQUIREMENTS OF R320.6 OF THE COA ORDINANCE 20140130-021.

TREE LIST

TAG #	SIZE (IN.)	SPECIES
1	24	TEXAS ASH
2	15	PECAN
3	13	PECAN
4	36	BALD CYPRESS
5	13	PECAN
6	40	LIVE OAK
7	10	TEXAS ASH
8	17,21	TEXAS ASH
9	36	AMERICAN ELM
10	33	AMERICAN ELM
11	30	AMERICAN ELM
12	32	AMERICAN ELM
13	24	AMERICAN ELM
14	41	AMERICAN ELM
15	18	AMERICAN ELM
16	27	HACKBERRY
17	15	HACKBERRY
18	12	LIVE OAK
19	14	HACKBERRY
20	10	CEDAR ELM
21	8	elm
22	32	LIVE OAK
23	9	HACKBERRY
24	13	LIVE OAK
25	10	LIVE OAK
26	12,11	LIVE OAK
27	12	LIVE OAK
28	10	LIVE OAK
29	21,17	LIVE OAK
30	11	HACKBERRY
31	18,11	LIVE OAK
32	21,13,14,10	LIVE OAK
33	8	LIVE OAK
34	11,8	LIVE OAK
35	36	LIVE OAK
36	11,19	LIVE OAK
37	6	ASH JUNIPER
38	12	LIVE OAK
39	12	LIVE OAK
40	14	LIVE OAK
41	10	ASH JUNIPER
42	8	ASH JUNIPER
43	8	ASH JUNIPER
44	28	LIVE OAK
*45	8	ASH JUNIPER*
*46	8	ASH JUNIPER*
*47	3	ASH JUNIPER
48	7,8	LIVE OAK
49	8,11,14	LIVE OAK
50	10	LIVE OAK
*51	7,8,9	LIVE OAK
*52	12	ASH JUNIPER
*53	8	LIVE OAK
*54	10	ASH JUNIPER
*55	12	ASH JUNIPER
*56	10	ASH JUNIPER
*57	6,7	LIVE OAK
*58	3,5	ASH JUNIPER
*59	7	ASH JUNIPER
*60	12	ASH JUNIPER
*61	6,7	LIVE OAK
*62	7	LIVE OAK
*63	8,9	ASH JUNIPER
*64	7,12	LIVE OAK*
*65	11,8	LIVE OAK*
*66	5	ASH JUNIPER*
*67	8,8	LIVE OAK*
68	10,7,8,17,11	LIVE OAK
*69	12,8	ASH JUNIPER

TREE SURVEY PERFORMED BY: Bartlett Tree Experts

TREE KEY

- XX — TREE LOCATION, TAG NUMBER
- ●XX — *TREE TO BE REMOVED* PROTECTED TREE
- 1/2 CRITICAL ROOT ZONES SHOWN USING THE COA FORMULA FOR SINGLE AND MULTI TRUNK TREES

1 Overall Site Plan
3/32" = 1'-0"
1"-40'

N

ZONING
LAKE AUSTIN (LA)

LEGAL DESCRIPTION
3709 WESTLAKE DR.
LOT 2 BUELL-RUDE SUBD

3701 WESTLAKE DR.
N 270.43 FT OF LOT 29 & S 70.62 FRNTG RD OF LOT 66 & 209.11 WATER WELL ST LAKE SHORE ADDN

BUILDER
DAGLEIGH CONSTRUCTION COMPANY
4018 SPICEWOOD SPRINGS RD
AUSTIN, TX 78759
(512)346-8504

THIS SHEET TO SCALE

1102 West Texas Avenue
Midland, Texas 79701
432.682.1252
432.682.1257 fax

rhotenberry wellen architects

04/08/16

NOTE: Sheet is formatted to 30"x48". Scales are 25% of noted when printed on 11x17 paper.

Westlake Residence
3701 Westlake Drive
Austin, TX

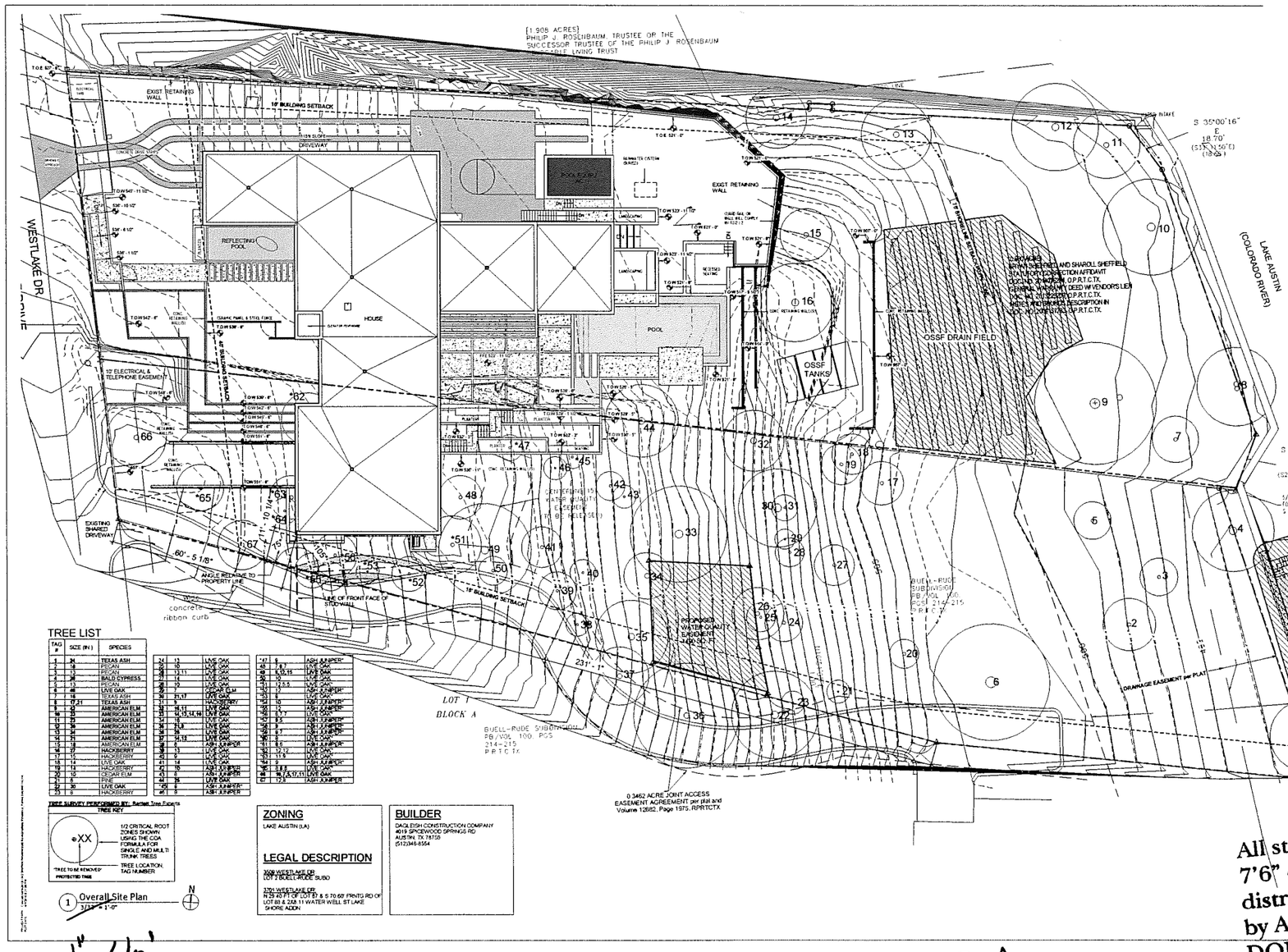
JOB NO. 1342

DRAWING TITLE
Basement

REVISIONS
△
△
△
△

DATE 04/07/16
DRAWN BY NCL
CHECKED BY MTW

SHEET NO.
A0.1



TREE LIST

TAG #	SIZE (IN.)	SPECIES
1	24	TEXAS ASH
2	18	PECAN
3	13	PECAN
4	36	BALD CYPRESS
5	13	PECAN
6	48	LIVE OAK
7	16	TEXAS ASH
8	17,21	TEXAS ASH
9	33	AMERICAN ELM
10	33	AMERICAN ELM
11	23	AMERICAN ELM
12	36	AMERICAN ELM
13	34	AMERICAN ELM
14	31	AMERICAN ELM
15	18	AMERICAN ELM
16	17	HACKBERRY
17	15	HACKBERRY
18	14	LIVE OAK
19	14	HACKBERRY
20	12	PECAN ELM
21	8	PINE
22	30	LIVE OAK
23	8	HACKBERRY
24	13	LIVE OAK
25	10	LIVE OAK
26	13,11	LIVE OAK
27	14	LIVE OAK
28	10	LIVE OAK
29	7	CRAPE CLM
30	21,17	LIVE OAK
31	9	HACKBERRY
32	16,11	LIVE OAK
33	14,13,16,16	LIVE OAK
34	15	LIVE OAK
35	7,8	LIVE OAK
36	26	LIVE OAK
37	14,15	LIVE OAK
38	6	ASH JUNIPER
39	13	LIVE OAK
40	9	LIVE OAK
41	14	LIVE OAK
42	15	ASH JUNIPER
43	8	ASH JUNIPER
44	25	LIVE OAK
45	6	ASH JUNIPER
46	9	ASH JUNIPER
47	6	ASH JUNIPER
48	8,8,7	LIVE OAK
49	9,10,15	LIVE OAK
50	15	LIVE OAK
51	12,6,5	LIVE OAK
52	12	ASH JUNIPER
53	6	LIVE OAK
54	10	ASH JUNIPER
55	7	ASH JUNIPER
56	9,7	LIVE OAK
57	9,5	ASH JUNIPER
58	9	ASH JUNIPER
59	9,7	ASH JUNIPER
60	7	LIVE OAK
61	8,6	ASH JUNIPER
62	12,12	LIVE OAK
63	11,8	LIVE OAK
64	9	ASH JUNIPER
65	8,8,8	LIVE OAK
66	18,7,5,(7,11)	LIVE OAK
67	12,8	ASH JUNIPER

TREE SURVEY PERFORMED BY: Bartlett Tree Experts

TREE KEY

eXX — 1/2 CRITICAL ROOT ZONES SHOWN USING THE CoA FORMULA FOR SINGLE AND MULTI TRUNK TREES
"TREE TO BE REMOVED" PROTECTED TREE
TREE LOCATION, TAG NUMBER

1 Overall Site Plan 1/32" = 1'-0"

N

1"-40'

ZONING
LAKE AUSTIN (LA)

LEGAL DESCRIPTION
3508 WESTLAKE DR
LOT 2 BLOCK A RUDE SUBD

3704 WESTLAKE DR
N 29.40 FT OF LOT 87 & S 70.60' FRNTG RD OF LOT 88 & 2X5.11 WATER WELL ST LAKE SHORE ADDN

BUILDER
DAGLEISH CONSTRUCTION COMPANY
4019 SPICEWOOD SPRINGS RD
AUSTIN, TX 78759
(512)346-8554

GENERAL NOTES

1. EGRESS WINDOWS AND DOORS TO COMPLY WITH CODE PER 2012 IRC-R130.
2. STAIRS, HANDRAILS, AND GUARDRAILS TO COMPLY WITH CODE PER 2012 IRC-R311 & R312.
3. VISITABLE BATHROOM COMPLIES WITH THE REQUIREMENTS OF R320.3 OF THE COA ORDINANCE 20140130-021.
4. VISITABLE LIGHT SWITCHES, RECEPTACLES, AND ENVIRONMENTS CONTROLS SHALL COMPLY WITH THE REQUIREMENTS OF R320.4 OF THE COA ORDINANCE 20140130-021.
5. VISITABLE BATHROOM ROUTE WILL BE PROVIDED PER THE REQUIREMENTS OF R320.5 OF THE COA ORDINANCE 20140130-021.
6. VISITABLE DWELLING ENTRANCE IS PROVIDED PER THE REQUIREMENTS OF R320.6 OF THE COA ORDINANCE 20140130-021.

AE APPROVED
APR 22 2016
113-345
DRB

REVIEWED
APR 25 2016
AUSTIN WATER UTILITY
CONSUMER SERVICE DIVISION - TAPS

All structures must maintain 7'6" clearance from AE energized distribution power lines. Enforced by AE and NESC codes-this review DOES NOT include transmission power lines.

NOT TO SCALE
STAMPED ONLY

rwa rhotenberry wellen architects
1102 West Texas Avenue
Midland, Texas 79701
432.682.1252
432.682.1257 fax

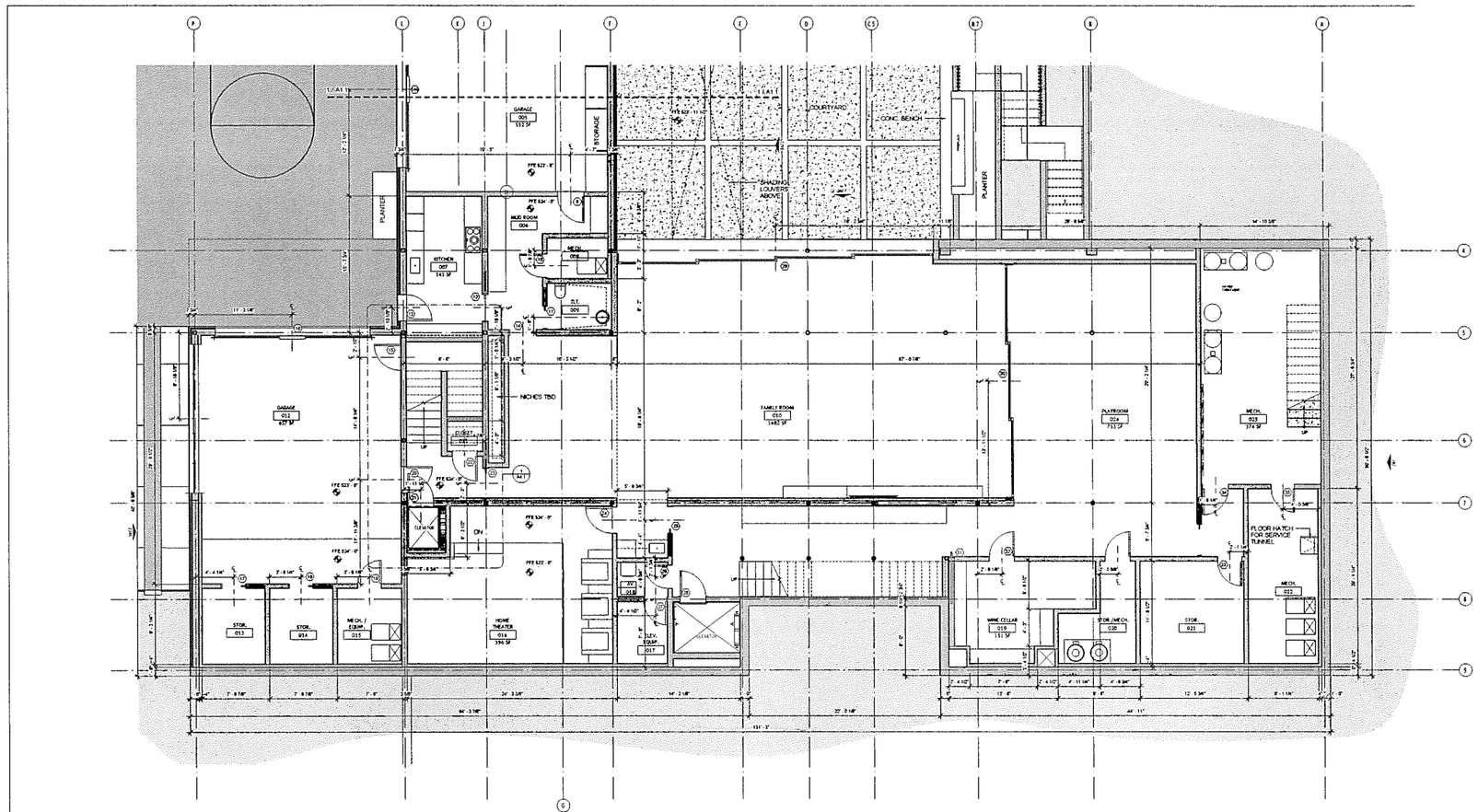
REGISTERED ARCHITECT WELLEN STATE OF TEXAS

04/08/16

NOTE: Sheet is formatted to 30"x48". Scales are 25% of noted when printed on 11x17 paper.

Westlake Residence
3701 Westlake Drive
Austin, TX

JOB NO.	1342
DRAWINGTITLE	Basement
REVISIONS	
△	
△	
△	
△	
DATE	04/07/16
DRAWN BY	NCL
CHECKED BY	MTW
SHEET NO.	A0.1



1 BASEMENT 1/4" = 1'-0" N

1/16" = 1'

GENERAL NOTES

1. EGRESS WINDOWS AND DOORS TO COMPLY WITH CODE PER 2012 IRC-R130.
2. STAIRS, HANDRAILS, AND GUARDRAILS TO COMPLY WITH CODE PER 2012 IRC-R311 & R312.
3. VISITABLE BATHROOM COMPLIES WITH THE REQUIREMENTS OF R320.3 OF THE COA ORDINANCE 20140130-021.
4. VISITABLE LIGHT SWITCHES, RECEPTACLES, AND ENVIRONMENTS CONTROLS SHALL COMPLY WITH THE REQUIREMENTS OF R320.4 OF THE COA ORDINANCE 20140130-021.
5. VISITABLE BATHROOM ROUTE WILL BE PROVIDED PER THE REQUIREMENTS OF R320.5 OF THE COA ORDINANCE 20140130-021.
6. VISITABLE DWELLING ENTRANCE IS PROVIDED PER THE REQUIREMENTS OF R320.6 OF THE COA ORDINANCE 20140130-021.

1102 West Texas Avenue
Midland, Texas 79701
432.682.1252
432.682.1257 fax

rwa
rhotenberry
wellen
architects

REGISTERED ARCHITECT WELLEN STATE OF TEXAS

04/08/16

NOTE: Sheet is formatted to 30"x48". Scales are noted when printed on 11x17 paper.

Westlake Residence
3701 Westlake Drive
Austin, TX

JOB NO. 1342

DRAWINGTITLE

Basement

REVISIONS

△
△
△
△

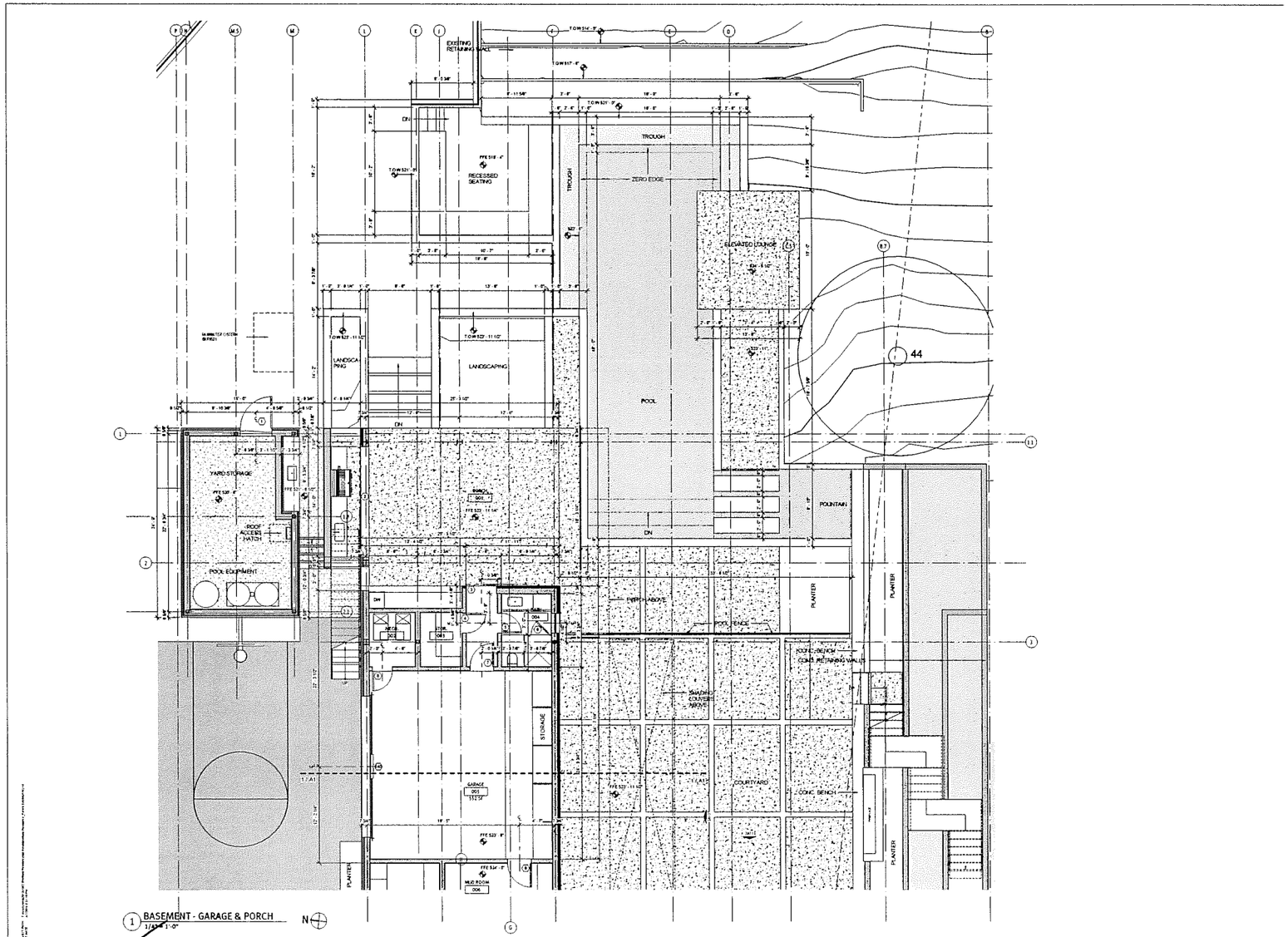
DATE 04/07/16

DRAWN BY NCL

CHECKED BY MTW

SHEET NO.

A1



1 BASEMENT - GARAGE & PORCH
1/16" = 1'-0"

1/16" = 1'

GENERAL NOTES

1. EGRESS WINDOWS AND DOORS TO COMPLY WITH CODE PER 2012 IRC-R130.
2. STAIRS, HANDRAILS, AND GUARDRAILS TO COMPLY WITH CODE PER 2012 IRC-R311 & R312.
3. VISITABLE BATHROOM COMPLIES WITH THE REQUIREMENTS OF R320.3 OF THE COA ORDINANCE 20140130-021.
4. VISITABLE LIGHT SWITCHES, RECEPTACLES, AND ENVIRONMENTS CONTROLS SHALL COMPLY WITH THE REQUIREMENTS OF R320.4 OF THE COA ORDINANCE 20140130-021.
5. VISITABLE BATHROOM ROUTE WILL BE PROVIDED PER THE REQUIREMENTS OF R320.5 OF THE COA ORDINANCE 20140130-021.
6. VISITABLE DWELLING ENTRANCE IS PROVIDED PER THE REQUIREMENTS OF R320.6 OF THE COA ORDINANCE 20140130-021.

1102 West Texas Avenue
Midland, Texas 79701
432.682.1252
432.682.1257 fax

rwa
rhotenberry
wellen
architects

REGISTERED ARCHITECT STATE OF TEXAS

04/08/16

NOTE: Sheet is formatted to 30"x48". Scales are 25% of noted when printed on 11x17 paper.

Westlake Residence
3701 Westlake Drive
Austin, TX

JOB NO. 1342

DRAWINGTITLE
Basement

REVISIONS
△
△
△
△

DATE 04/07/16
DRAWN BY NCL
CHECKED BY MTW

SHEET NO.
A1.1

1/16" = 1'

GENERAL NOTES

1. EGRESS WINDOWS AND DOORS TO COMPLY WITH CODE PER 2012 IRC-R130.
2. STAIRS, HANDRAILS, AND GUARDRAILS TO COMPLY WITH CODE PER 2012 IRC-R311 & R312.
3. VISITABLE BATHROOM COMPLIES WITH THE REQUIREMENTS OF R320.3 OF THE COA ORDINANCE 20140130-021.
4. VISITABLE LIGHT SWITCHES, RECEPTACLES, AND ENVIRONMENTS CONTROLS SHALL COMPLY WITH THE REQUIREMENTS OF R320.4 OF THE COA ORDINANCE 20140130-021.
5. VISITABLE BATHROOM ROUTE WILL BE PROVIDED PER THE REQUIREMENTS OF R320.5 OF THE COA ORDINANCE 20140130-021.
6. VISITABLE DWELLING ENTRANCE IS PROVIDED PER THE REQUIREMENTS OF R320.6 OF THE COA ORDINANCE 20140130-021.

1102 West Texas Avenue
Midland, Texas 79701
432 .682 .1252
432 .682 .1257 fax

rwa
rhotenberry
wellen
architects

REGISTERED ARCHITECT MICHAEL T. WELLEN 13574 STATE OF TEXAS

04/08/16

NOTE: Sheet is formatted to 30"x48". Scales are noted when printed on 11x17 paper.

Westlake Residence
3701 Westlake Drive
Austin, TX

JOB NO. 1342

DRAWING TITLE

Basement

REVISIONS

△
△
△
△

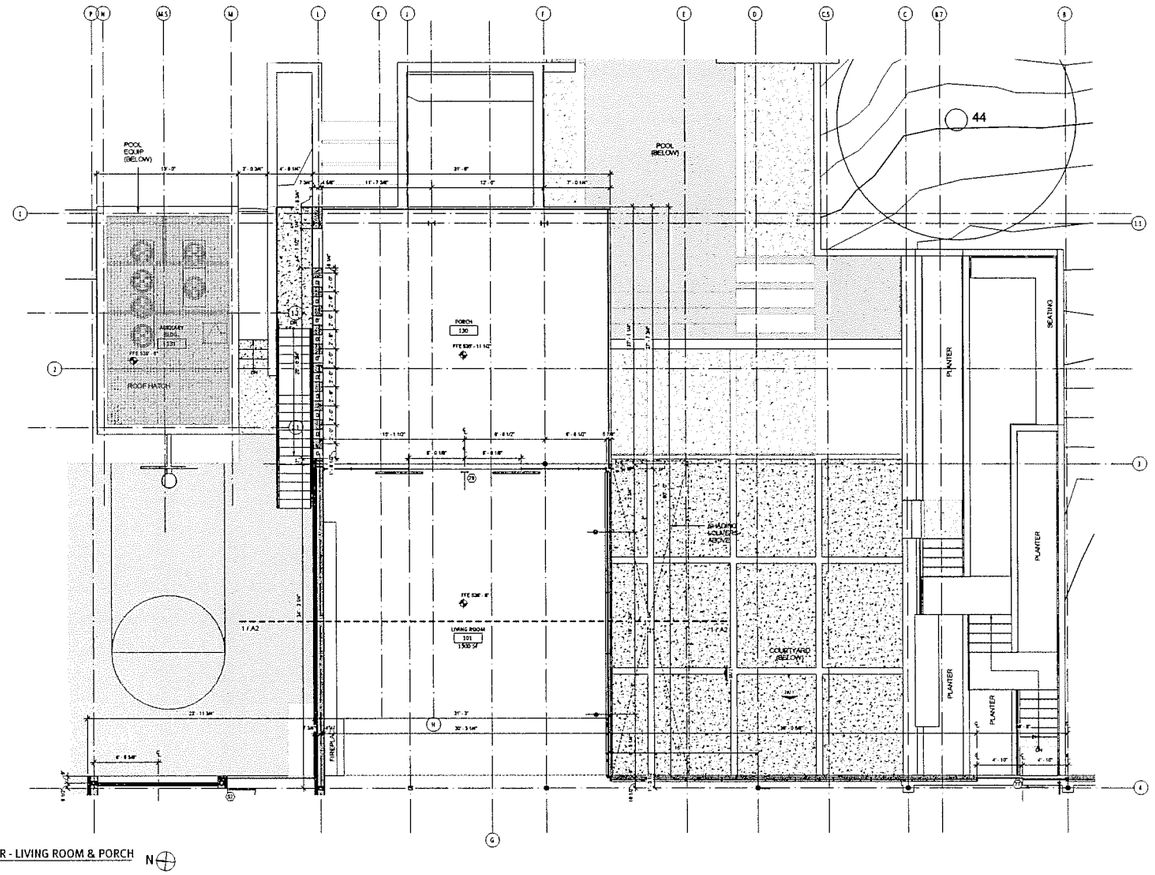
DATE 04/07/16

DRAWN BY NCL

CHECKED BY MTW

SHEET NO.

A2



1 1st FLOOR - LIVING ROOM & PORCH
1/16" = 1'-0"

N

1/16" = 1'

GENERAL NOTES

1. EGRESS WINDOWS AND DOORS TO COMPLY WITH CODE PER 2012 IRC-R130.
2. STAIRS, HANDRAILS, AND GUARDRAILS TO COMPLY WITH CODE PER 2012 IRC-R311 & R312.
3. VISITABLE BATHROOM COMPLIES WITH THE REQUIREMENTS OF R320.3 OF THE COA ORDINANCE 20140130-021.
4. VISITABLE LIGHT SWITCHES, RECEPTACLES, AND ENVIRONMENTS CONTROLS SHALL COMPLY WITH THE REQUIREMENTS OF R320.4 OF THE COA ORDINANCE 20140130-021.
5. VISITABLE BATHROOM ROUTE WILL BE PROVIDED PER THE REQUIREMENTS OF R320.5 OF THE COA ORDINANCE 20140130-021.
6. VISITABLE DWELLING ENTRANCE IS PROVIDED PER THE REQUIREMENTS OF R320.6 OF THE COA ORDINANCE 20140130-021.

1102 West Texas Avenue
Midland, Texas 79701
432 .682 .1252
432 .682 .1257 fax

rwa
rhotenberry
wellen
architects

REGISTERED ARCHITECT MARK T. WELLEN STATE OF TEXAS

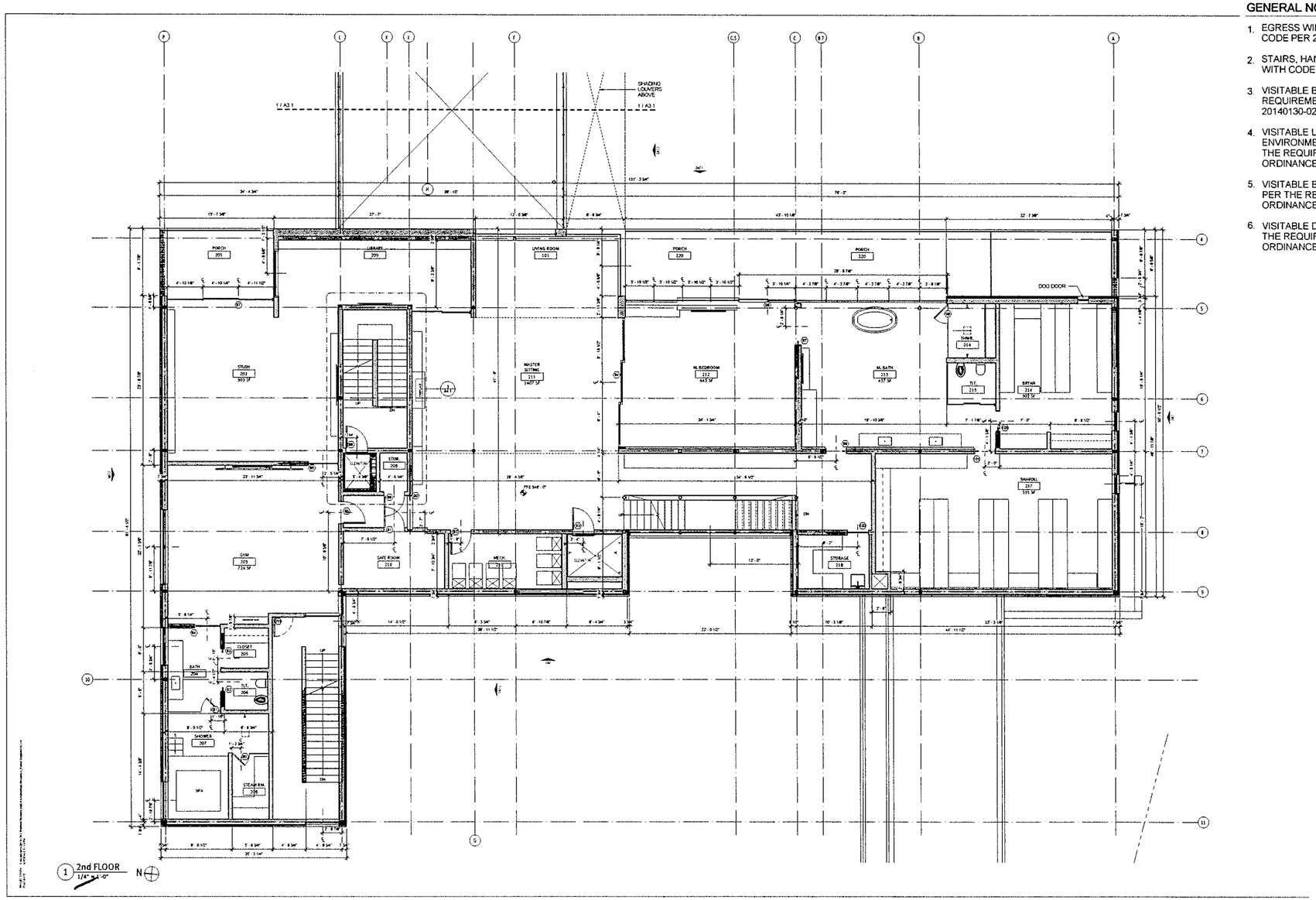
04/08/16

NOTE: Sheet is formatted to 30"x48". Scales are 25% of noted when printed on 11x17 paper.

Westlake Residence
3701 Westlake Drive
Austin, TX

JOB NO.	1342
DRAWINGTITLE	
Basement	
REVISIONS	
DATE	04/07/16
DRAWN BY	NCL
CHECKED BY	MTW
SHEET NO.	

A2.1



1/16" = 1'

GENERAL NOTES

1. EGRESS WINDOWS AND DOORS TO COMPLY WITH CODE PER 2012 IRC-R130.
2. STAIRS, HANDRAILS, AND GUARDRAILS TO COMPLY WITH CODE PER 2012 IRC-R311 & R312.
3. VISITABLE BATHROOM COMPLIES WITH THE REQUIREMENTS OF R320.3 OF THE COA ORDINANCE 20140130-021.
4. VISITABLE LIGHT SWITCHES, RECEPTACLES, AND ENVIRONMENTS CONTROLS SHALL COMPLY WITH THE REQUIREMENTS OF R320.4 OF THE COA ORDINANCE 20140130-021.
5. VISITABLE BATHROOM ROUTE WILL BE PROVIDED PER THE REQUIREMENTS OF R320.5 OF THE COA ORDINANCE 20140130-021.
6. VISITABLE DWELLING ENTRANCE IS PROVIDED PER THE REQUIREMENTS OF R320.6 OF THE COA ORDINANCE 20140130-021.

1102 West Texas Avenue
Midland, Texas 79701
432 .682 .1252
432 .682 .1257 fax

rwa
rhotenberry wellen architects

REGISTERED ARCHITECT STATE OF TEXAS

04/08/16

NOTE: Sheet is formatted to 30"x48". Scales are 25% of noted when printed on 11x17 paper.

Westlake Residence
3701 Westlake Drive
Austin, TX

JOB NO. 1342

DRAWINGTITLE

Basement

REVISIONS

△
△
△
△

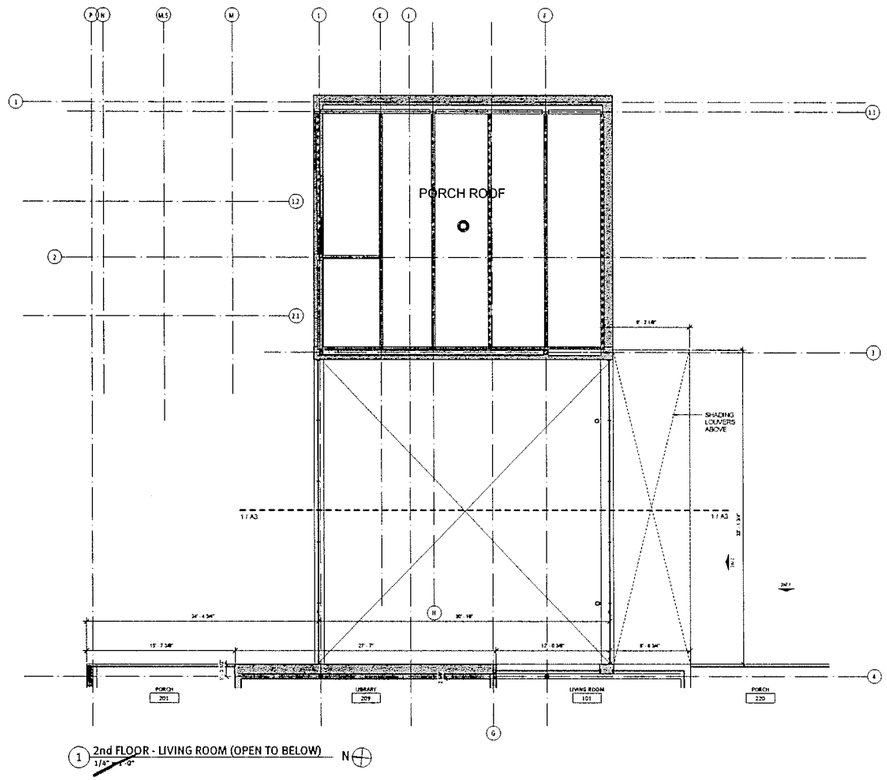
DATE 04/07/16

DRAWN BY NCL

CHECKED BY MTW

SHEET NO.

A3



1 2nd FLOOR - LIVING ROOM (OPEN TO BELOW) 1/16" = 1'-0"

1/16" = 1'

GENERAL NOTES

1. EGRESS WINDOWS AND DOORS TO COMPLY WITH CODE PER 2012 IRC-R130.
2. STAIRS, HANDRAILS, AND GUARDRAILS TO COMPLY WITH CODE PER 2012 IRC-R311 & R312.
3. VISITABLE BATHROOM COMPLIES WITH THE REQUIREMENTS OF R320.3 OF THE COA ORDINANCE 20140130-021.
4. VISITABLE LIGHT SWITCHES, RECEPTACLES, AND ENVIRONMENTS CONTROLS SHALL COMPLY WITH THE REQUIREMENTS OF R320.4 OF THE COA ORDINANCE 20140130-021.
5. VISITABLE BATHROOM ROUTE WILL BE PROVIDED PER THE REQUIREMENTS OF R320.5 OF THE COA ORDINANCE 20140130-021.
6. VISITABLE DWELLING ENTRANCE IS PROVIDED PER THE REQUIREMENTS OF R320.6 OF THE COA ORDINANCE 20140130-021.

1102 West Texas Avenue
Midland, Texas 79701
432.682.1252
432.682.1257 fax

rwa
rhotenberry
wellen
architects

REGISTERED ARCHITECT MATTHEW T. WELLEN STATE OF TEXAS 23574

04/08/16

NOTE: Sheet is formatted to 30"x48". Scales are noted when printed on 11x17 paper.

Westlake Residence
3701 Westlake Drive
Austin, TX

JOB NO. 1342

DRAWINGTITLE

Basement

REVISIONS

△
△
△
△

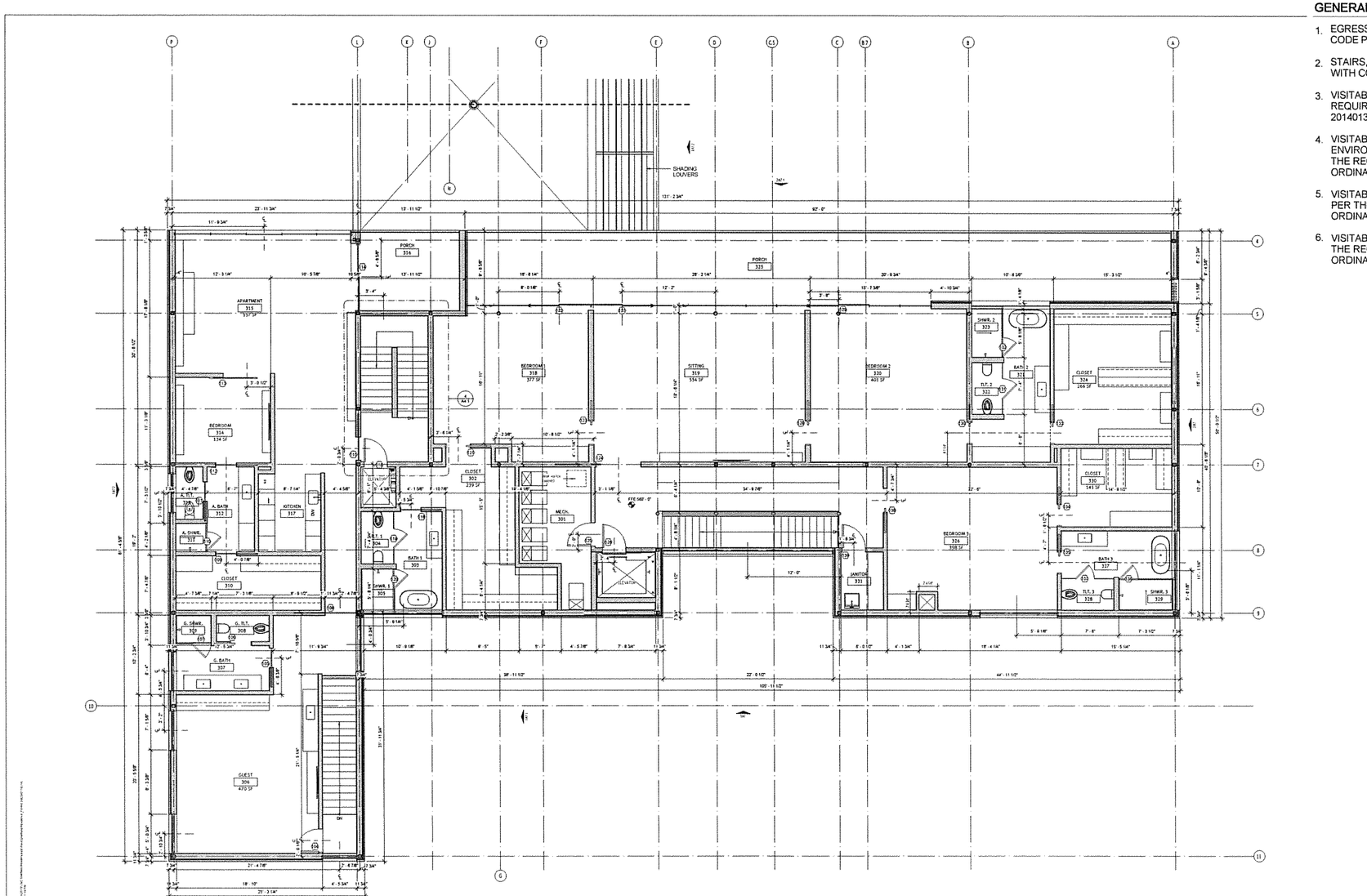
DATE 04/07/16

DRAWN BY NCL

CHECKED BY MTW

SHEET NO.

A3.1



1/16" = 1'

GENERAL NOTES

1. EGRESS WINDOWS AND DOORS TO COMPLY WITH CODE PER 2012 IRC-R130.
2. STAIRS, HANDRAILS, AND GUARDRAILS TO COMPLY WITH CODE PER 2012 IRC-R311 & R312.
3. VISITABLE BATHROOM COMPLIES WITH THE REQUIREMENTS OF R320.3 OF THE COA ORDINANCE 20140130-021.
4. VISITABLE LIGHT SWITCHES, RECEPTACLES, AND ENVIRONMENTS CONTROLS SHALL COMPLY WITH THE REQUIREMENTS OF R320.4 OF THE COA ORDINANCE 20140130-021.
5. VISITABLE BATHROOM ROUTE WILL BE PROVIDED PER THE REQUIREMENTS OF R320.5 OF THE COA ORDINANCE 20140130-021.
6. VISITABLE DWELLING ENTRANCE IS PROVIDED PER THE REQUIREMENTS OF R320.6 OF THE COA ORDINANCE 20140130-021.

1102 West Texas Avenue
Midland, Texas 79701
432 .682 .1252
432 .682 .1257 fax

rwa
rhotenberry
wellen
architects

REGISTERED ARCHITECT STATE OF TEXAS 6574 WILLIAM C. WELLEN

04/08/16

NOTE: Sheet is formatted to 30"x48". Scales are 25% of noted when printed on 11x17 paper.

Westlake Residence
3701 Westlake Drive
Austin, TX

JOB NO. 1342

DRAWINGTITLE

Basement

REVISIONS

△
△
△
△

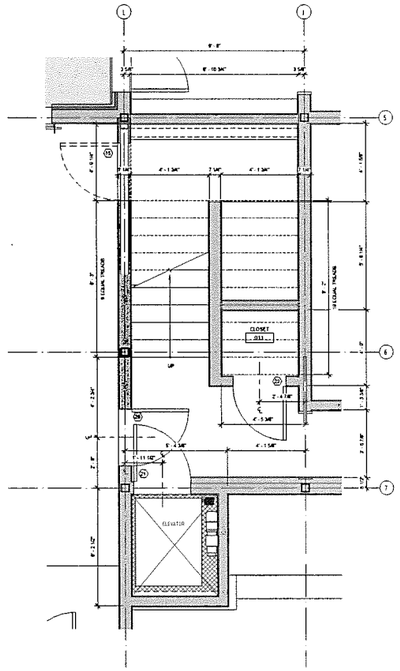
DATE 04/07/16

DRAWN BY NCL

CHECKED BY MTW

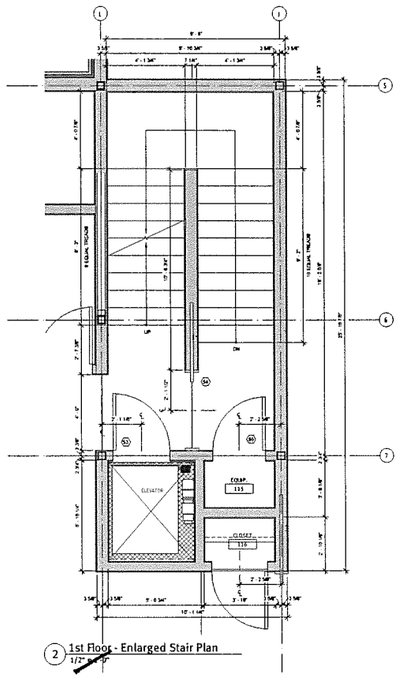
SHEET NO.

A4



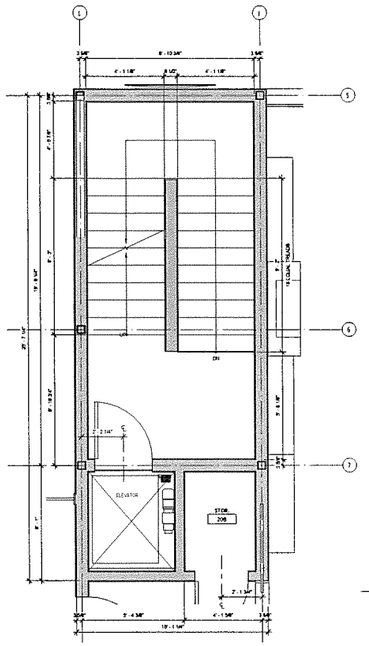
1 Basement - Enlarged Stair Plan
1/8" = 1'-0"

1/8" = 1'



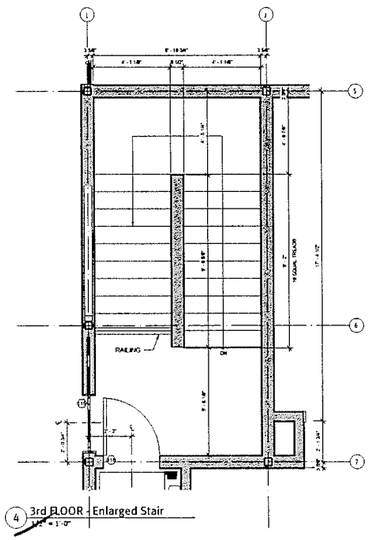
2 1st Floor - Enlarged Stair Plan
1/8" = 1'-0"

1/8" = 1'



3 2nd Floor - Enlarged Stair Plan
1/8" = 1'-0"

1/8" = 1'



4 3rd FLOOR - Enlarged Stair
1/8" = 1'-0"

1/8" = 1'

GENERAL NOTES

1. EGRESS WINDOWS AND DOORS TO COMPLY WITH CODE PER 2012 IRC-R130.
2. STAIRS, HANDRAILS, AND GUARDRAILS TO COMPLY WITH CODE PER 2012 IRC-R311 & R312.
3. VISITABLE BATHROOM COMPLIES WITH THE REQUIREMENTS OF R320.3 OF THE COA ORDINANCE 20140130-021.
4. VISITABLE LIGHT SWITCHES, RECEPTACLES, AND ENVIRONMENTS CONTROLS SHALL COMPLY WITH THE REQUIREMENTS OF R320.4 OF THE COA ORDINANCE 20140130-021.
5. VISITABLE BATHROOM ROUTE WILL BE PROVIDED PER THE REQUIREMENTS OF R320.5 OF THE COA ORDINANCE 20140130-021.
6. VISITABLE DWELLING ENTRANCE IS PROVIDED PER THE REQUIREMENTS OF R320.6 OF THE COA ORDINANCE 20140130-021.

1102 West Texas Avenue
Midland, Texas 79701
432.682.1252
432.682.1257 fax

rwa
rhotenberry
wellen
architects

REGISTERED ARCHITECT WELLEN 6574 STATE OF TEXAS

04/08/16

NOTE: Sheet is formatted to 30"x48". Scales are noted when printed on 11x17 paper.

Westlake Residence
3701 Westlake Drive
Austin, TX

JOB NO. 1342

DRAWINGTITLE

Basement

REVISIONS

△
△
△
△

DATE 04/07/16

DRAWN BY NCL

CHECKED BY MTW

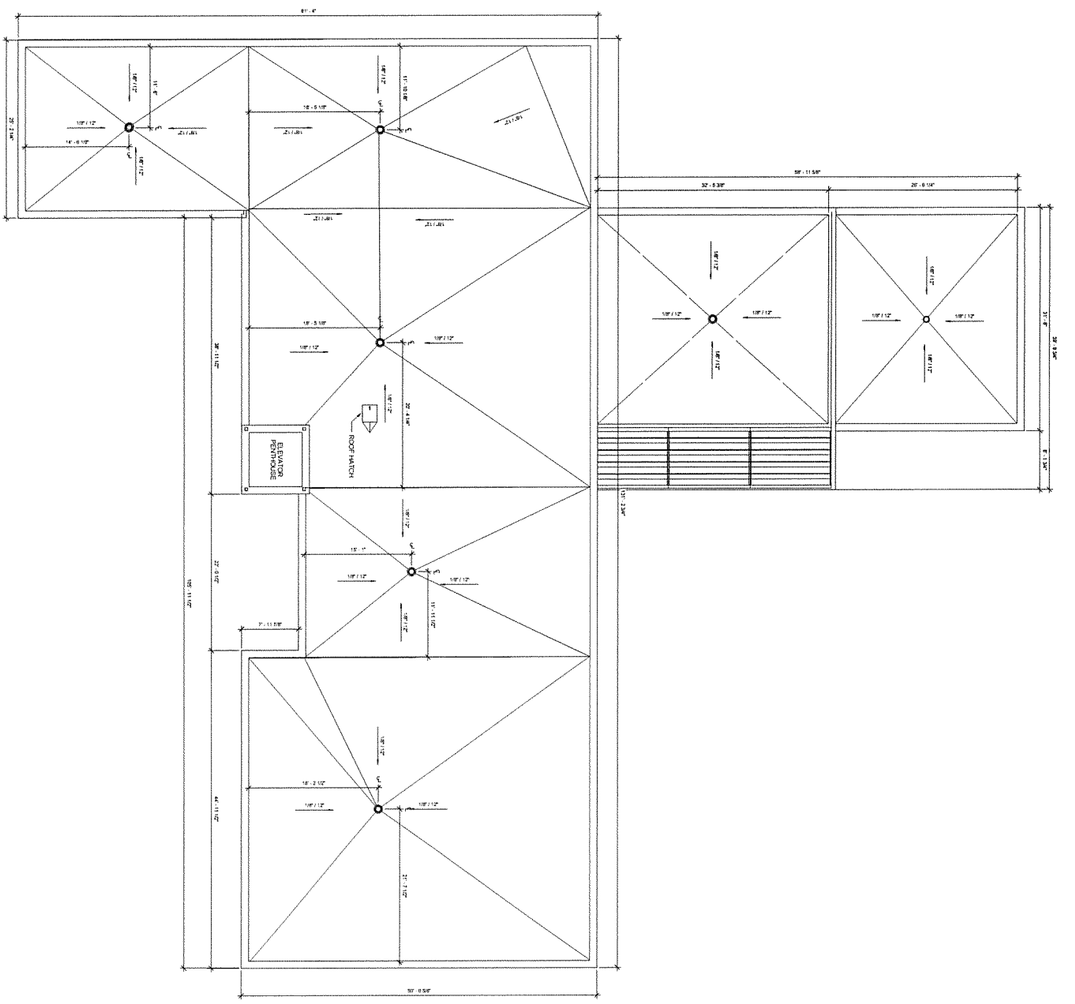
SHEET NO.

A4.1

1/16" = 1'

1 Roof Plan
3/16" = 1'-0"

N



A5

DATE 04/07/16
DRAWN BY NCL
CHECKED BY MTW
SHEET NO.

REVISIONS
Basement

JOB NO. 1342
DRAWING TITLE

Westlake Residence
3701 Westlake Drive
Austin, TX

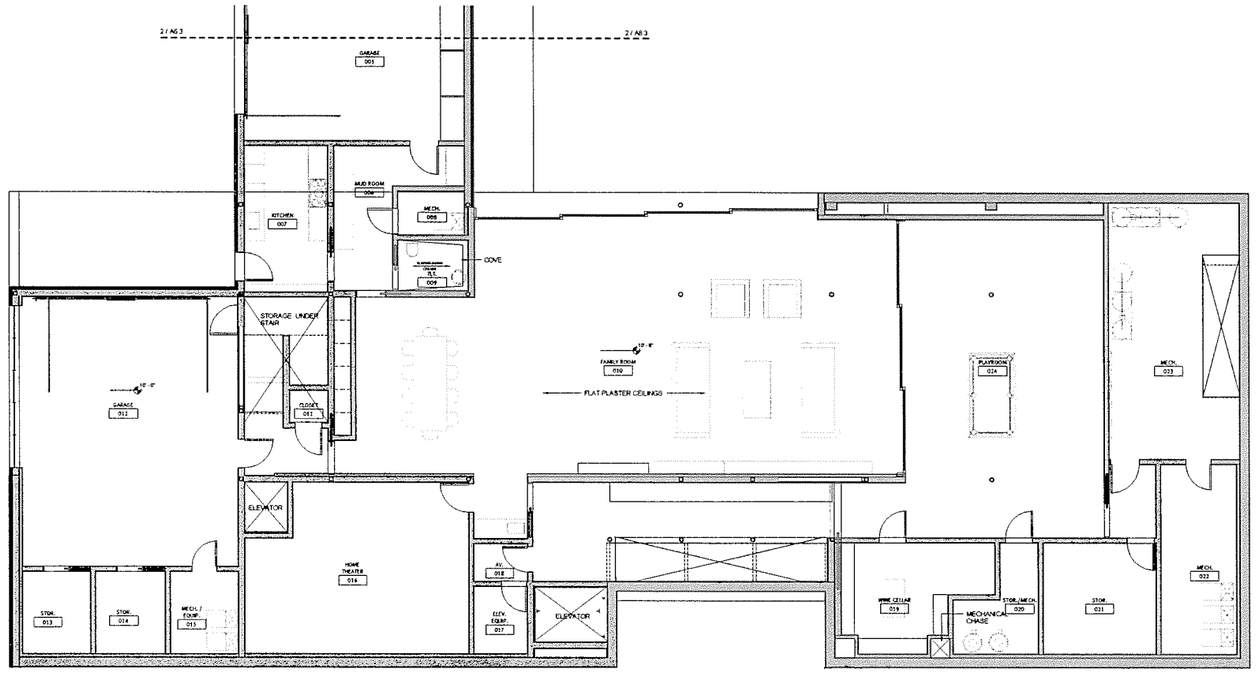
NOTE: Sheet is formatted to 30"x48". Scales are 25% of noted when printed on 11x17 paper.

04/08/16

REGISTERED ARCHITECT
MARK T. WELLEN
8374
STATE OF TEXAS

rwa
rhotenberry wellen architects

1102 West Texas Avenue
Midland, Texas 79701
432 .682 .1252
432 .682 .1257 *fax*



1 BASEMENT - RCP
1/16" = 1'-0"

1/16" = 1'

GENERAL NOTES

1. EGRESS WINDOWS AND DOORS TO COMPLY WITH CODE PER 2012 IRC-R130.
2. STAIRS, HANDRAILS, AND GUARDRAILS TO COMPLY WITH CODE PER 2012 IRC-R311 & R312.
3. VISITABLE BATHROOM COMPLIES WITH THE REQUIREMENTS OF R320.3 OF THE COA ORDINANCE 20140130-021.
4. VISITABLE LIGHT SWITCHES, RECEPTACLES, AND ENVIRONMENTS CONTROLS SHALL COMPLY WITH THE REQUIREMENTS OF R320.4 OF THE COA ORDINANCE 20140130-021.
5. VISITABLE BATHROOM ROUTE WILL BE PROVIDED PER THE REQUIREMENTS OF R320.5 OF THE COA ORDINANCE 20140130-021.
6. VISITABLE DWELLING ENTRANCE IS PROVIDED PER THE REQUIREMENTS OF R320.6 OF THE COA ORDINANCE 20140130-021.

1102 West Texas Avenue
Midland, Texas 79701
432.682.1252
432.682.1257 fax

rwa
rhotenberry
wellen
architects

04/08/16

NOTE: Sheet is formatted to 30"x48". Scales are 25% of noted when printed on 11x17 paper.

Westlake Residence
3701 Westlake Drive
Austin, TX

JOB NO. 1342

DRAWINGTITLE

Basement

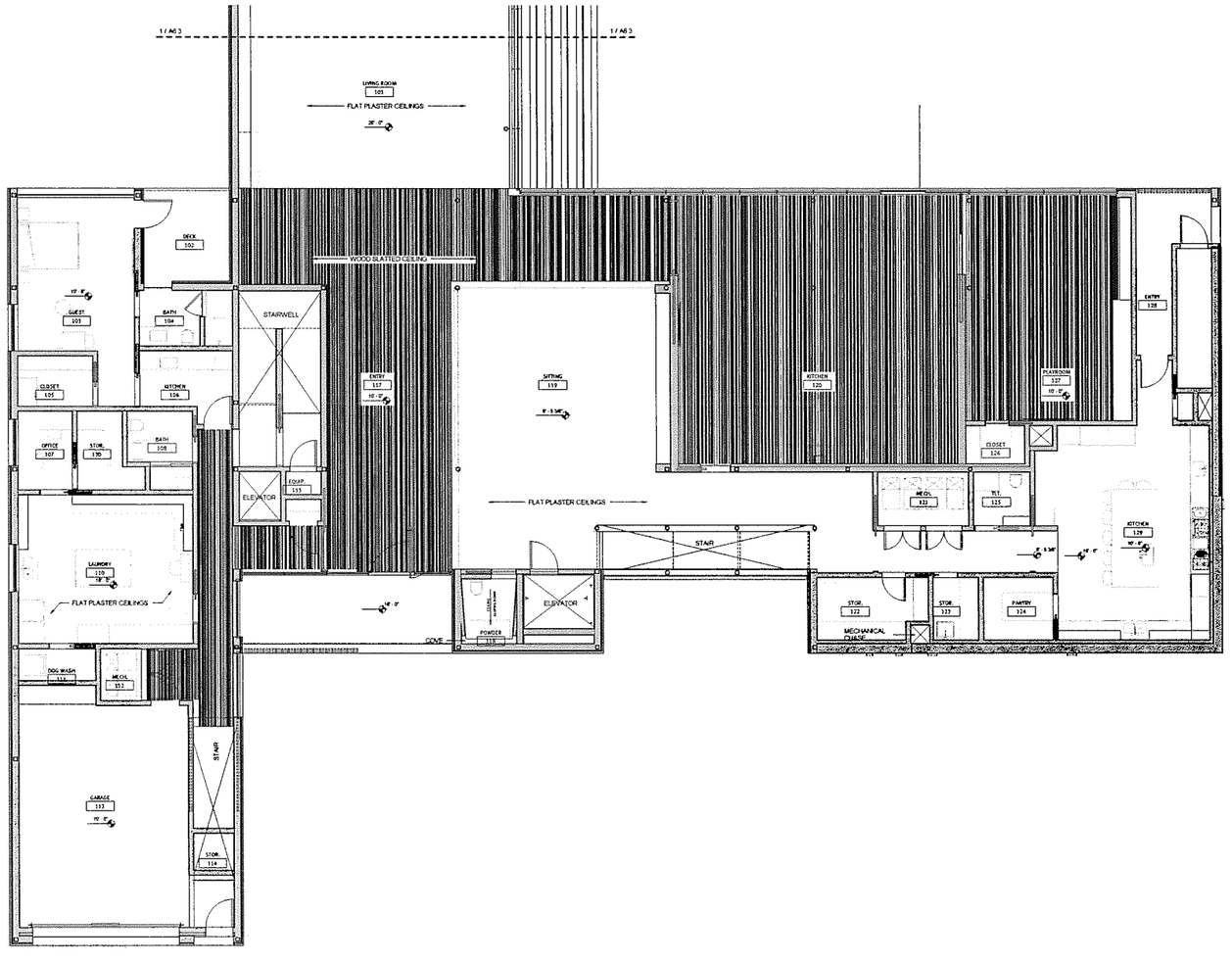
REVISIONS

△
△
△
△

DATE 04/07/16
DRAWN BY NCL
CHECKED BY MTW

SHEET NO.

A6



1 1st FLOOR - RCP
1/4" = 1'-0"

1/16" = 1'

GENERAL NOTES

1. EGRESS WINDOWS AND DOORS TO COMPLY WITH CODE PER 2012 IRC-R130.
2. STAIRS, HANDRAILS, AND GUARDRAILS TO COMPLY WITH CODE PER 2012 IRC-R311 & R312.
3. VISITABLE BATHROOM COMPLIES WITH THE REQUIREMENTS OF R320.3 OF THE COA ORDINANCE 20140130-021.
4. VISITABLE LIGHT SWITCHES, RECEPTACLES, AND ENVIRONMENTS CONTROLS SHALL COMPLY WITH THE REQUIREMENTS OF R320.4 OF THE COA ORDINANCE 20140130-021.
5. VISITABLE BATHROOM ROUTE WILL BE PROVIDED PER THE REQUIREMENTS OF R320.5 OF THE COA ORDINANCE 20140130-021.
6. VISITABLE DWELLING ENTRANCE IS PROVIDED PER THE REQUIREMENTS OF R320.6 OF THE COA ORDINANCE 20140130-021.

1102 West Texas Avenue
Midland, Texas 79701
432.682.1252
432.682.1257 fax

rwa
rhotenberry wellen architects

REGISTERED ARCHITECT STATE OF TEXAS ROTENBERRY WELLEN

04/08/16

NOTE: Sheet is formatted to 30"x48". Scales are 25% of noted when printed on 11x17 paper.

Westlake Residence
3701 Westlake Drive
Austin, TX

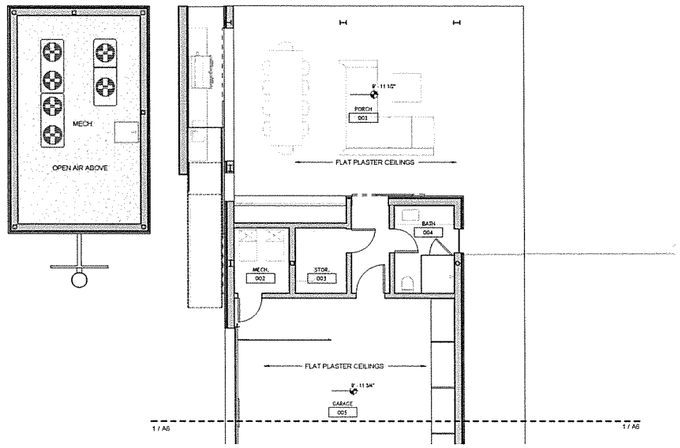
JOB NO. 1342

DRAWINGTITLE
Basement

REVISIONS
△
△
△
△

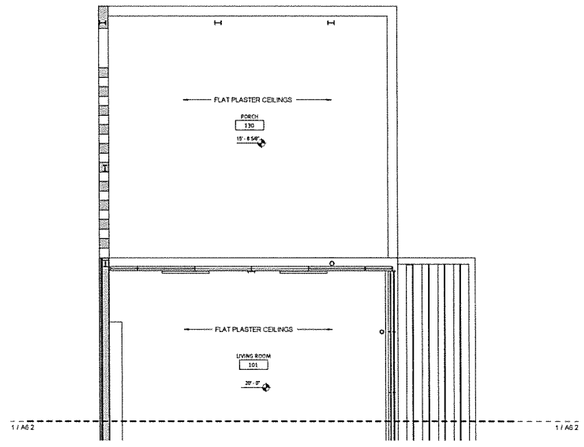
DATE 04/07/16
DRAWN BY NCL
CHECKED BY MTW

SHEET NO.
A6.2



2 BASEMENT - GARAGE & PORCH - RCP
1/4" = 1'-0"

1/16" = 1'

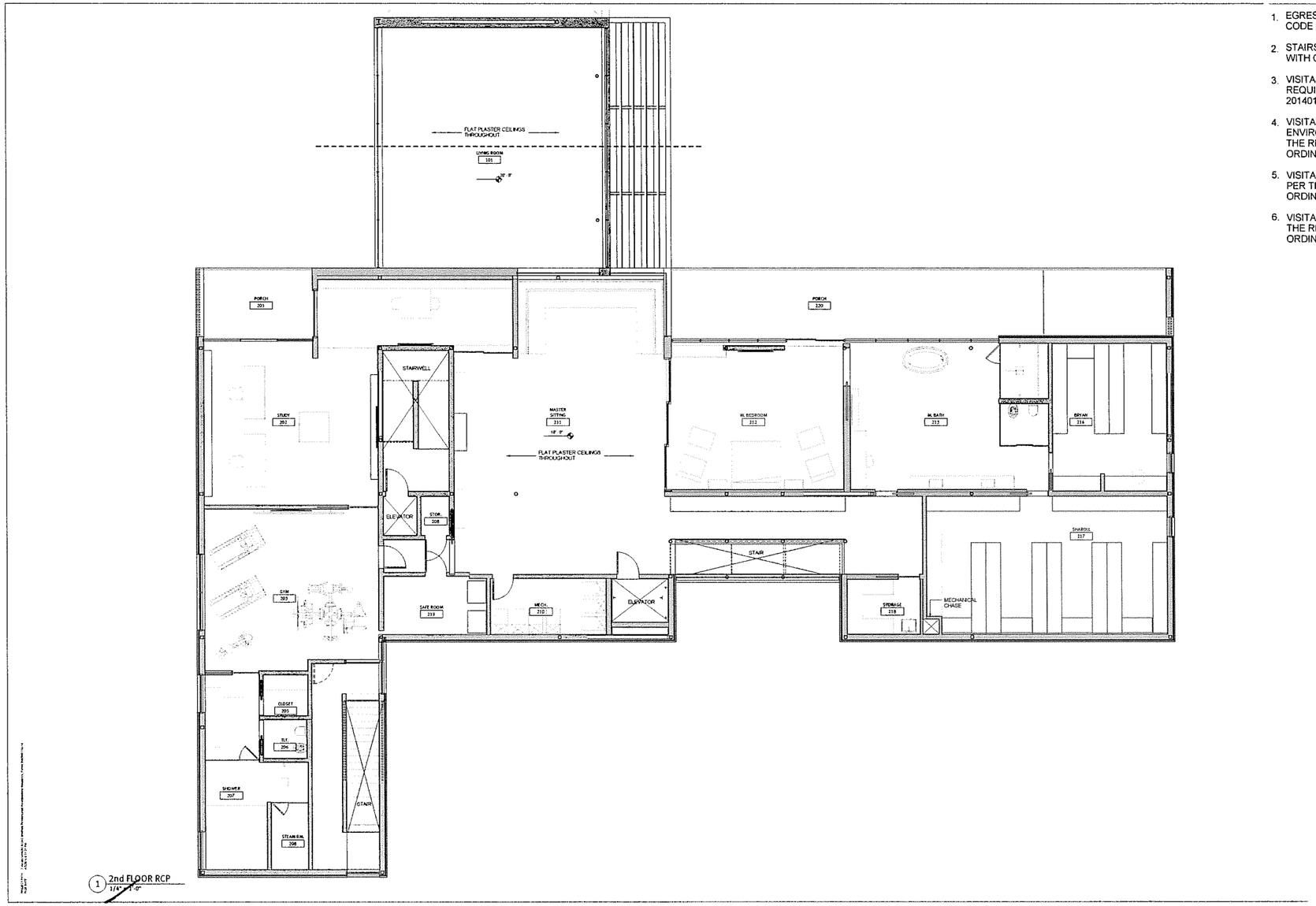


1 1st FLOOR - LIVING ROOM & PORCH - RCP
1/4" = 1'-0"

1/16" = 1'

GENERAL NOTES

1. EGRESS WINDOWS AND DOORS TO COMPLY WITH CODE PER 2012 IRC-R130.
2. STAIRS, HANDRAILS, AND GUARDRAILS TO COMPLY WITH CODE PER 2012 IRC-R311 & R312.
3. VISITABLE BATHROOM COMPLIES WITH THE REQUIREMENTS OF R320.3 OF THE COA ORDINANCE 20140130-021.
4. VISITABLE LIGHT SWITCHES, RECEPTACLES, AND ENVIRONMENTS CONTROLS SHALL COMPLY WITH THE REQUIREMENTS OF R320.4 OF THE COA ORDINANCE 20140130-021.
5. VISITABLE BATHROOM ROUTE WILL BE PROVIDED PER THE REQUIREMENTS OF R320.5 OF THE COA ORDINANCE 20140130-021.
6. VISITABLE DWELLING ENTRANCE IS PROVIDED PER THE REQUIREMENTS OF R320.6 OF THE COA ORDINANCE 20140130-021.



1 2nd FLOOR RCP
1/4" = 1'-0"

1/16" = 1'

GENERAL NOTES

1. EGRESS WINDOWS AND DOORS TO COMPLY WITH CODE PER 2012 IRC-R130.
2. STAIRS, HANDRAILS, AND GUARDRAILS TO COMPLY WITH CODE PER 2012 IRC-R311 & R312.
3. VISITABLE BATHROOM COMPLIES WITH THE REQUIREMENTS OF R320.3 OF THE COA ORDINANCE 20140130-021.
4. VISITABLE LIGHT SWITCHES, RECEPTACLES, AND ENVIRONMENTS CONTROLS SHALL COMPLY WITH THE REQUIREMENTS OF R320.4 OF THE COA ORDINANCE 20140130-021.
5. VISITABLE BATHROOM ROUTE WILL BE PROVIDED PER THE REQUIREMENTS OF R320.5 OF THE COA ORDINANCE 20140130-021.
6. VISITABLE DWELLING ENTRANCE IS PROVIDED PER THE REQUIREMENTS OF R320.6 OF THE COA ORDINANCE 20140130-021.

1102 West Texas Avenue
Midland, Texas 79701
432 .682 .1252
432 .682 .1257 fax

rwa rhotenberry wellen architects

REGISTERED ARCHITECT STATE OF TEXAS MICHAEL T. WELLEN

04/08/16

NOTE: Sheet is formatted to 30"x48". Scales are 25% of noted when printed on 11x17 paper.

Westlake Residence
3701 Westlake Drive
Austin, TX

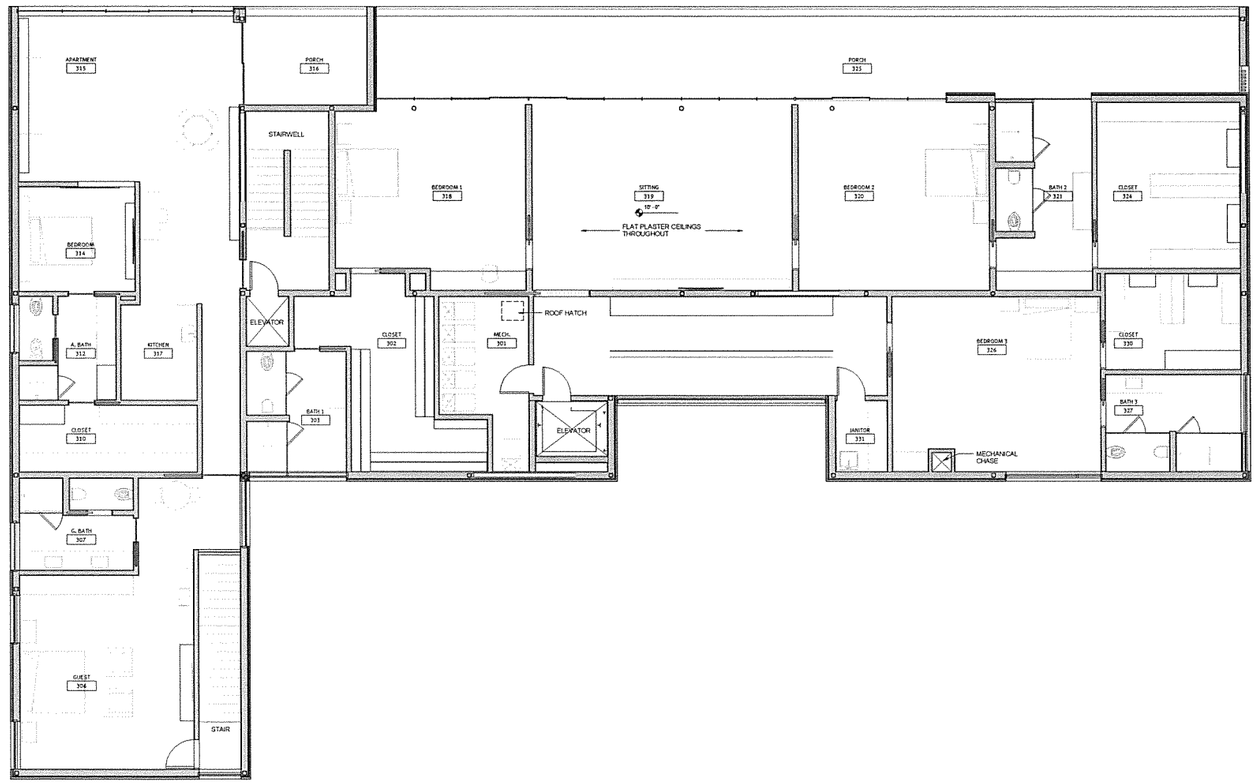
JOB NO. 1342

DRAWINGTITLE
Basement

REVISIONS
△
△
△
△

DATE 04/07/16
DRAWN BY NCL
CHECKED BY MTW

SHEET NO.
A6.4



1 3rd FLOOR - RCP
1/16" = 1'-0"

1/16" = 1'

GENERAL NOTES

1. EGRESS WINDOWS AND DOORS TO COMPLY WITH CODE PER 2012 IRC-R130.
2. STAIRS, HANDRAILS, AND GUARDRAILS TO COMPLY WITH CODE PER 2012 IRC-R311 & R312.
3. VISITABLE BATHROOM COMPLIES WITH THE REQUIREMENTS OF R320.3 OF THE COA ORDINANCE 20140130-021.
4. VISITABLE LIGHT SWITCHES, RECEPTACLES, AND ENVIRONMENTS CONTROLS SHALL COMPLY WITH THE REQUIREMENTS OF R320.4 OF THE COA ORDINANCE 20140130-021.
5. VISITABLE BATHROOM ROUTE WILL BE PROVIDED PER THE REQUIREMENTS OF R320.5 OF THE COA ORDINANCE 20140130-021.
6. VISITABLE DWELLING ENTRANCE IS PROVIDED PER THE REQUIREMENTS OF R320.6 OF THE COA ORDINANCE 20140130-021.

1102 West Texas Avenue
Midland, Texas 79701
432 .682 .1252
432 .682 .1257 fax

rwa
rhotenberry wellen architects

REGISTERED ARCHITECT MATTHEW T. WELLEN STATE OF TEXAS 23574

04/08/16

NOTE: Sheet is formatted to 30"x48". Scales are noted when printed on 11x17 paper.

Westlake Residence
3701 Westlake Drive
Austin, TX

JOB NO. 1342

DRAWINGTITLE

Basement

REVISIONS

△
△
△
△

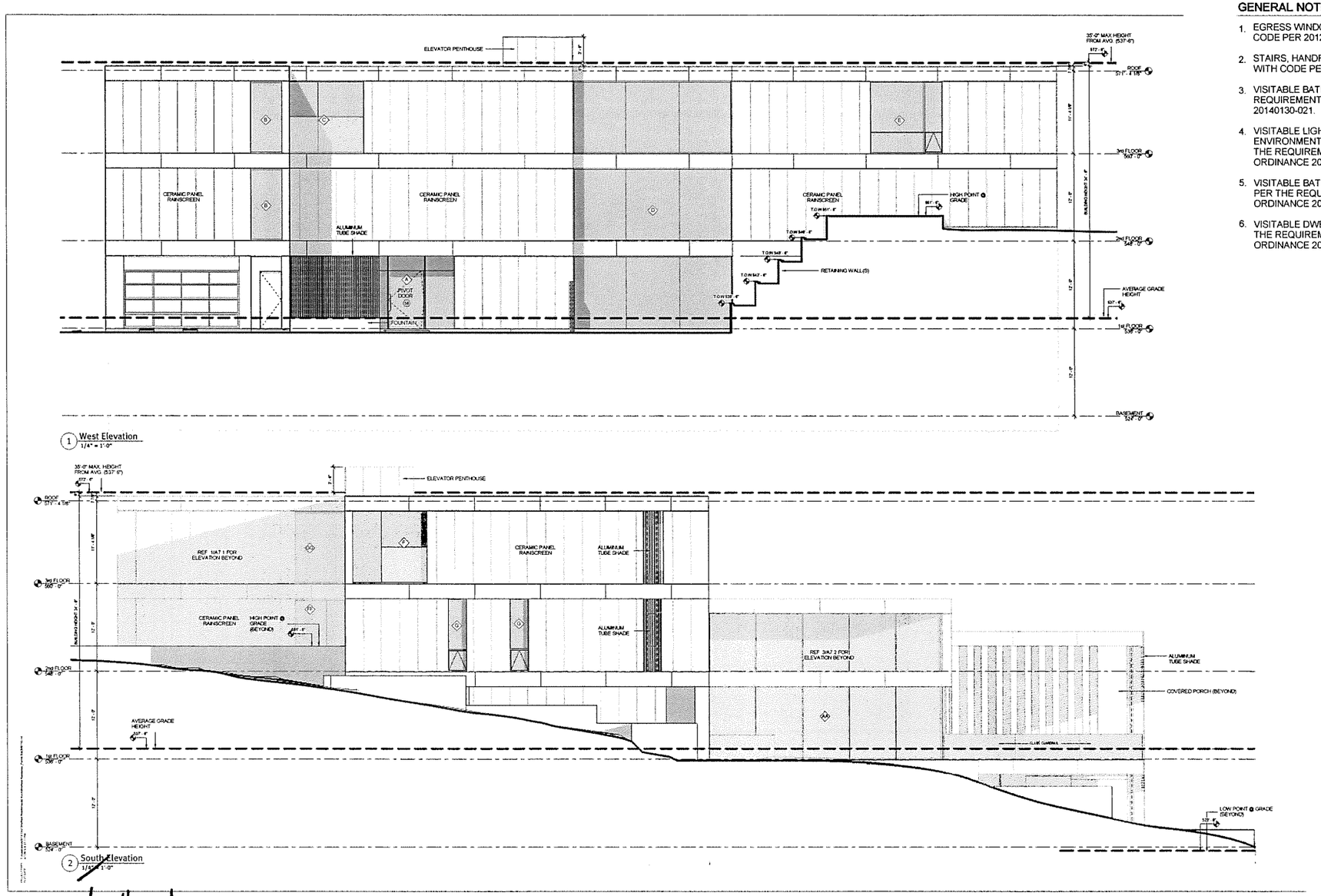
DATE 04/07/16

DRAWN BY NCL

CHECKED BY MTW

SHEET NO.

A6.5



1/16" = 1'

GENERAL NOTES

1. EGRESS WINDOWS AND DOORS TO COMPLY WITH CODE PER 2012 IRC-R130.
2. STAIRS, HANDRAILS, AND GUARDRAILS TO COMPLY WITH CODE PER 2012 IRC-R311 & R312.
3. VISITABLE BATHROOM COMPLIES WITH THE REQUIREMENTS OF R320.3 OF THE COA ORDINANCE 20140130-021.
4. VISITABLE LIGHT SWITCHES, RECEPTACLES, AND ENVIRONMENTS CONTROLS SHALL COMPLY WITH THE REQUIREMENTS OF R320.4 OF THE COA ORDINANCE 20140130-021.
5. VISITABLE BATHROOM ROUTE WILL BE PROVIDED PER THE REQUIREMENTS OF R320.5 OF THE COA ORDINANCE 20140130-021.
6. VISITABLE DWELLING ENTRANCE IS PROVIDED PER THE REQUIREMENTS OF R320.6 OF THE COA ORDINANCE 20140130-021.

1102 West Texas Avenue
Midland, Texas 79701
432 .682 .1252
432 .682 .1257 fax

rwa
rhotenberry
wellen
architects

REGISTERED ARCHITECT STATE OF TEXAS MARK T. WELLEN 8874

04/08/16

NOTE: Sheet is formatted to 30"x48". Scales are noted when printed on 11x17 paper.

Westlake Residence
3701 Westlake Drive
Austin, TX

JOB NO. 1342

DRAWINGTITLE

Basement

REVISIONS

△
△
△
△

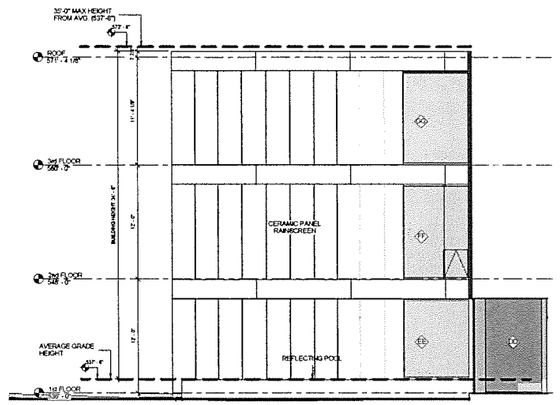
DATE 04/07/16

DRAWN BY NCL

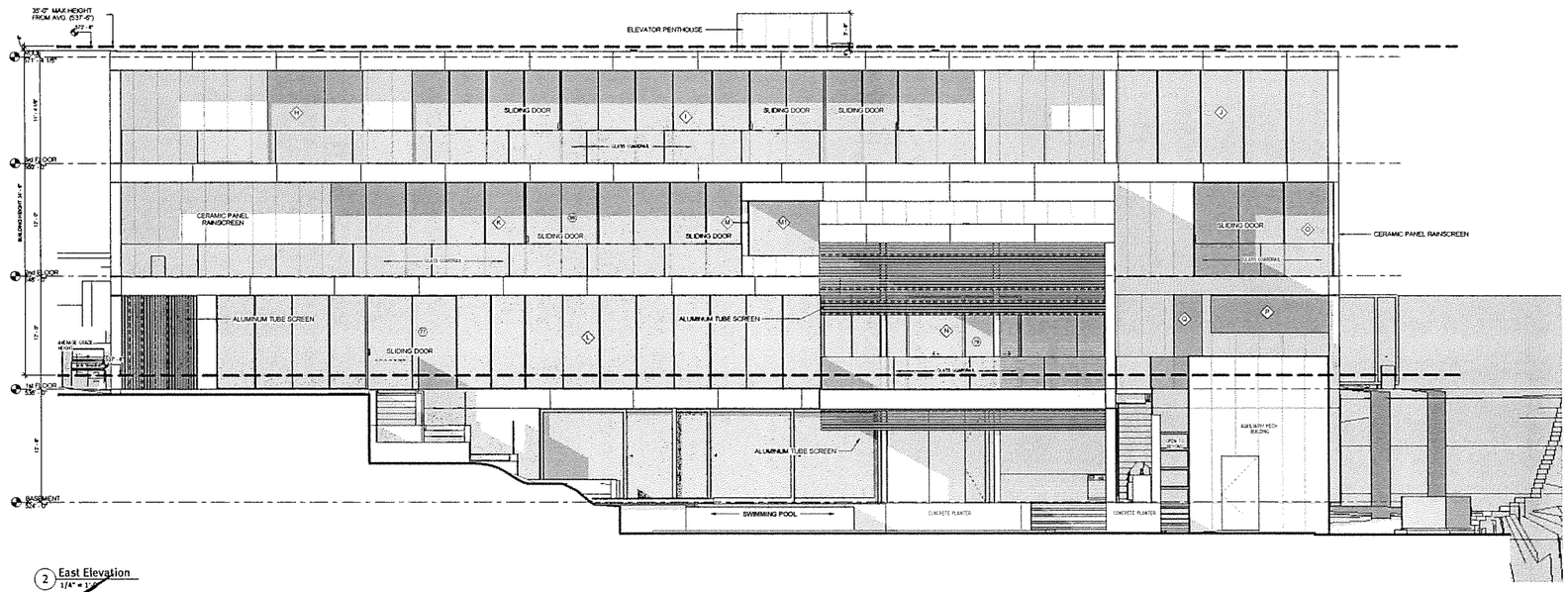
CHECKED BY MTW

SHEET NO.

A7



1 South Elevation - Entry Courtyard
1/4" = 1'-0"



2 East Elevation
1/4" = 1'-0"

1/16" = 1'

GENERAL NOTES

1. EGRESS WINDOWS AND DOORS TO COMPLY WITH CODE PER 2012 IRC-R130.
2. STAIRS, HANDRAILS, AND GUARDRAILS TO COMPLY WITH CODE PER 2012 IRC-R311 & R312.
3. VISITABLE BATHROOM COMPLIES WITH THE REQUIREMENTS OF R320.3 OF THE COA ORDINANCE 20140130-021.
4. VISITABLE LIGHT SWITCHES, RECEPTACLES, AND ENVIRONMENTS CONTROLS SHALL COMPLY WITH THE REQUIREMENTS OF R320.4 OF THE COA ORDINANCE 20140130-021.
5. VISITABLE BATHROOM ROUTE WILL BE PROVIDED PER THE REQUIREMENTS OF R320.5 OF THE COA ORDINANCE 20140130-021.
6. VISITABLE DWELLING ENTRANCE IS PROVIDED PER THE REQUIREMENTS OF R320.6 OF THE COA ORDINANCE 20140130-021.

1102 West Texas Avenue
Midland, Texas 79701
432 .682 .1252
432 .682 .1257 fax

rwa rhotenberry wellen architects

REGISTERED ARCHITECT STATE OF TEXAS

04/08/16

NOTE: Sheet is formatted to 30"x48". Scales are 25% of noted when printed on 11x17 paper.

Westlake Residence
3701 Westlake Drive
Austin, TX

JOB NO. 1342

DRAWINGTITLE

Basement

REVISIONS

△
△
△
△

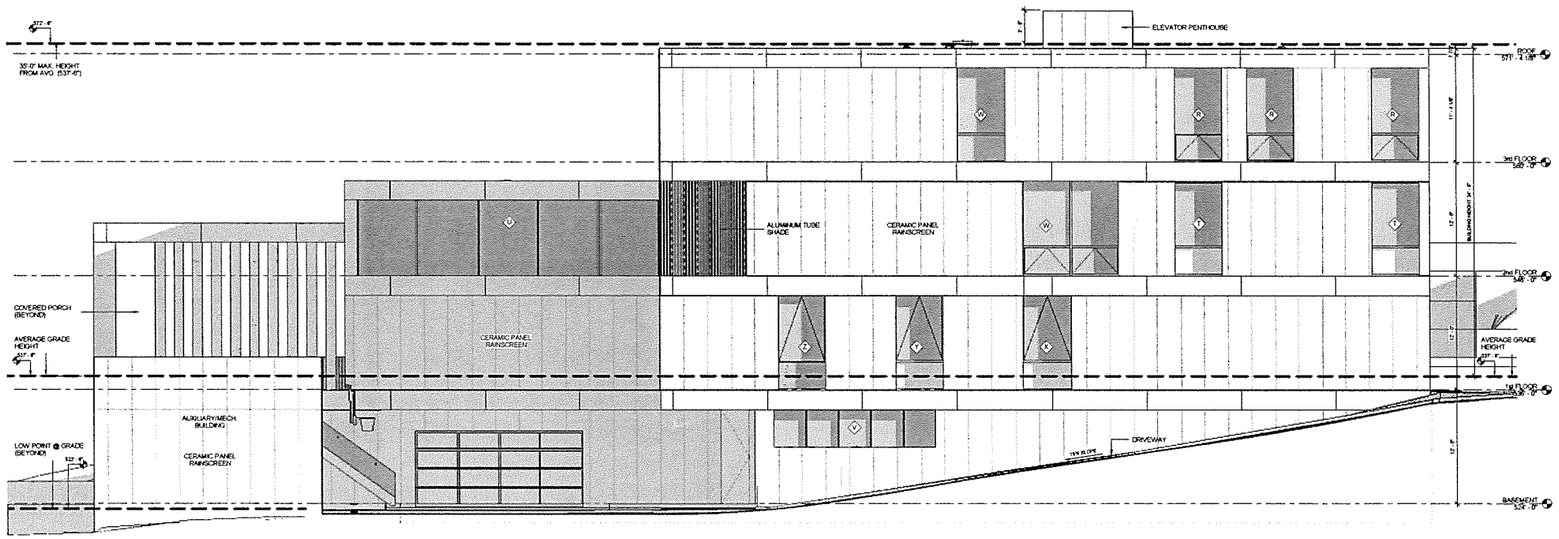
DATE 04/07/16

DRAWN BY NCL

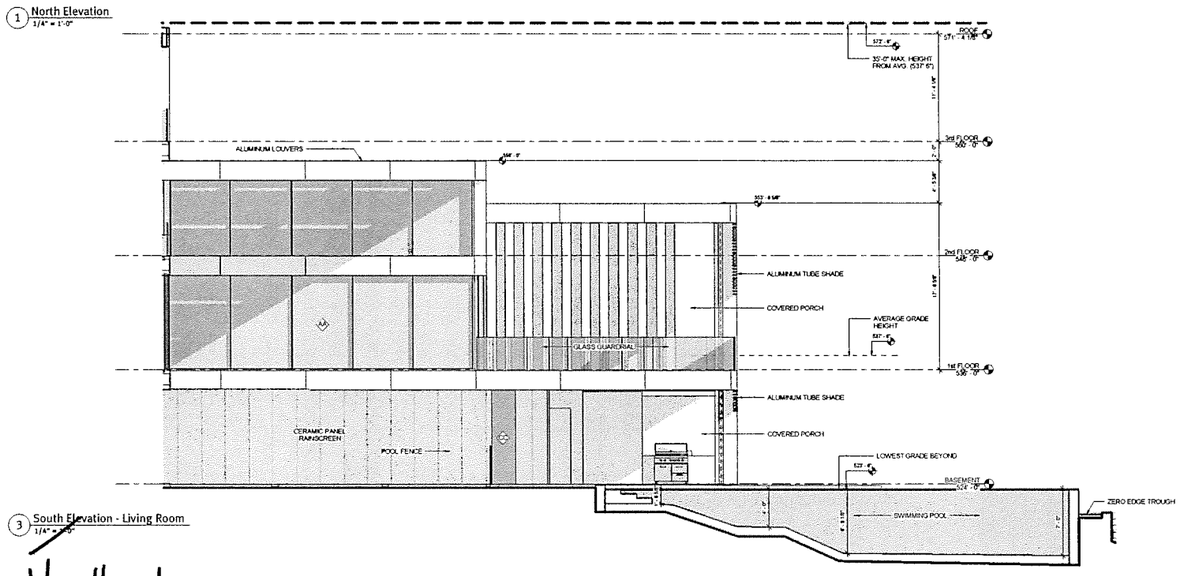
CHECKED BY MTW

SHEET NO.

A7.1



1 North Elevation
1/4" = 1'-0"



3 South Elevation - Living Room
1/4" = 1'-0"

1/16" = 1'

GENERAL NOTES

1. EGRESS WINDOWS AND DOORS TO COMPLY WITH CODE PER 2012 IRC-R130.
2. STAIRS, HANDRAILS, AND GUARDRAILS TO COMPLY WITH CODE PER 2012 IRC-R311 & R312.
3. VISITABLE BATHROOM COMPLIES WITH THE REQUIREMENTS OF R320.3 OF THE COA ORDINANCE 20140130-021.
4. VISITABLE LIGHT SWITCHES, RECEPTACLES, AND ENVIRONMENTS CONTROLS SHALL COMPLY WITH THE REQUIREMENTS OF R320.4 OF THE COA ORDINANCE 20140130-021.
5. VISITABLE BATHROOM ROUTE WILL BE PROVIDED PER THE REQUIREMENTS OF R320.5 OF THE COA ORDINANCE 20140130-021.
6. VISITABLE DWELLING ENTRANCE IS PROVIDED PER THE REQUIREMENTS OF R320.6 OF THE COA ORDINANCE 20140130-021.

1102 West Texas Avenue
Midland, Texas 79701
432 .682 .1252
432 .682 .1257 fax

rwa
rhotenberry
wellen
architects

REGISTERED ARCHITECT STATE OF TEXAS

04/08/16

NOTE: Sheet is formatted to 30"x48". Scales are 25% of noted when printed on 11x17 paper.

Westlake Residence
3701 Westlake Drive
Austin, TX

JOB NO. 1342

DRAWINGTITLE

Basement

REVISIONS

△
△
△
△

DATE 04/07/16

DRAWN BY NCL

CHECKED BY MTW

SHEET NO.

A7.2

Door Schedule

Door Number	Door Size Width	Door Size Height	Rough Width	Manufacturer	Details Frame Type	Details Head	Details Jamb	Details Sill	Comments
	4' - 4 1/4"	10' - 0"		Rimadesio - Velaria					
1	4' - 0"	8' - 0"		TBD					
2	14' - 0"	9' - 8 1/4"		TBD					
3	3' - 10"	10' - 0"		TBD					
4	2' - 6"	10' - 0"		Luxlis - Rasomuro555					
5	2' - 6"	10' - 0"		Luxlis - Rasomuro555					
6	2' - 6"	7' - 11 1/2"		SHOWER					GLASS
7	3' - 0"	10' - 0"		Luxlis - Rasomuro555					
8	2' - 6"	10' - 0"		Luxlis - Rasomuro555					
9	3' - 0"	10' - 0"		Luxlis - Rasomuro555					
10	2' - 6"	10' - 0"		Luxlis - Rasomuro555					
11	2' - 6"	10' - 0"		Luxlis					
12	3' - 0"	10' - 0"		Luxlis					
13	3' - 0"	10' - 0"		TBD					
14	3' - 0"	10' - 0"		Luxlis					
15	3' - 0"	6' - 0"		Luxlis - Rasomuro555					
16	17' - 10"	8' - 0"	17' - 10"	TBD					
17	2' - 8"	10' - 0"		Luxlis					
18	2' - 8"	10' - 0"		Luxlis					
19	2' - 6"	10' - 0"		Luxlis - Rasomuro555					
20	3' - 0"	10' - 0"		Luxlis - Rasomuro555					
21	3' - 0"	6' - 6"							ELEVATOR
22	2' - 10"	10' - 0"		Luxlis - Rasomuro555					
23	2' - 4"	10' - 0"							
24	2' - 0"	10' - 0"		Luxlis - Rasomuro555					
25	3' - 0"	10' - 0"		Luxlis					
26	2' - 8"	10' - 0"		Luxlis - Rasomuro555					
27	2' - 8"	10' - 0"		Luxlis - Rasomuro555					
28	3' - 0"	6' - 6"							ELEVATOR
29	36' - 4 1/4"	10' - 1 3/8"	36' - 0 1/4"	Vitrocsa					
30	26' - 10"	10' - 1 3/8"	26' - 11"	Rimadesio - Velaria					
31	10' - 9 3/8"	10' - 0"							
32	2' - 10"	10' - 0"		Luxlis - Rasomuro555					
33	2' - 10"	10' - 0"		Luxlis - Rasomuro555					
34	3' - 0"	10' - 0"		Luxlis - Rasomuro555					
35	2' - 8"	10' - 0"		Luxlis - Rasomuro555					
36	15' - 10"	8' - 0"	15' - 10"	TBD					
37	3' - 0"	7' - 10 1/2"		TBD					
38	2' - 8"	17' - 0"							
39	3' - 0"	10' - 0"		Luxlis - Rasomuro555					
40	5' - 6"	10' - 0"		Luxlis - Rasomuro555					
41	3' - 0"	10' - 0"		Luxlis					
42	2' - 6"	10' - 0"		Luxlis					
43	3' - 0"	10' - 0"		Luxlis					
44	2' - 8"	10' - 0"		Luxlis					
45	2' - 8"	10' - 0"		Luxlis					
46	4' - 6"	10' - 0"		Luxlis					
47	3' - 0"	10' - 0"		Luxlis - Rasomuro555					
48	3' - 6"	10' - 0"		Luxlis					
49	2' - 6"	10' - 0"		Luxlis					
50	2' - 8"	10' - 0"		Luxlis					
51	2' - 6"	7' - 11 1/2"		SHOWER					GLASS
52	3' - 0"	10' - 0"		Luxlis - Rasomuro555					
53	3' - 0"	6' - 6"							ELEVATOR
54	4' - 0"	10' - 0"		Luxlis					
55	2' - 10"	10' - 0"		Luxlis - Rasomuro555					
56	3' - 0"	10' - 0"		Luxlis - Rasomuro555					
57	4' - 6"	10' - 0"		Luxlis					
58	4' - 11 1/4"	7' - 11 5/8"		Vitrocsa					
59	2' - 8"	9' - 6"	5' - 5"						
60	3' - 0"	10' - 0"		Luxlis - Rasomuro555					
61	3' - 0"	9' - 6"							
62	4' - 3"	10' - 0"							
63	4' - 0"	9' - 6"							

Door Schedule

Door Number	Door Size Width	Door Size Height	Rough Width	Manufacturer	Details Frame Type	Details Head	Details Jamb	Details Sill	Comments
64	2' - 6"	9' - 6"							
65	2' - 6"	7' - 0"		TBD					
67	2' - 6"	9' - 6"							
68	4' - 0"	9' - 6"							
69	2' - 6"	9' - 6"							
70	4' - 3"	9' - 6"							
71	2' - 6"	10' - 0"		Luxlis					
72	2' - 6"	10' - 0"		Luxlis					
73	2' - 11 3/8"	10' - 0"		Vitrocsa					
74	3' - 0"	10' - 0"		Luxlis - Rasomuro555					
75	2' - 6"	10' - 0"	5' - 1"	Luxlis					
76	8' - 7 3/4"	9' - 10 3/8"		Rimadesio - Velaria					
77	9' - 6 1/2"	10' - 0"		Vitrocsa					
78	7' - 10"	10' - 0"		Luxlis					
79	12' - 0 1/4"	10' - 0"		Vitrocsa					
80	2' - 4"	7' - 11 1/2"		SHOWER					GLASS
81	2' - 6"	7' - 11 1/2"		SHOWER					GLASS
82	2' - 6"	10' - 0"		Luxlis					
83	2' - 6"	10' - 0"		Luxlis					
84	3' - 6"	10' - 0"	7' - 1"	Luxlis					
85	5' - 0"	10' - 0"		Luxlis - Rasomuro555					
86	4' - 0"	10' - 0"	8' - 1"	Luxlis					
87	9' - 7 3/4"	9' - 11 1/4"		Vitrocsa					
88	3' - 0"	10' - 0"		Luxlis - Rasomuro555					
89	2' - 10"	10' - 0"		Luxlis - Rasomuro555					
90	4' - 6"	10' - 0"		Luxlis					
91	2' - 10"	10' - 0"		Luxlis - Rasomuro555					
92	2' - 10"	10' - 0"		Luxlis - Rasomuro555					
93	3' - 0"	10' - 0"		Luxlis - Rasomuro555					
94	17' - 9"	10' - 1 3/8"	17' - 10"	Rimadesio - Velaria					
96	7' - 8 1/2"	10' - 0"		Vitrocsa					
97	5' - 0"	7' - 10 1/2"		Luxlis					
98	2' - 8"	10' - 0"		Luxlis					
99	2' - 6"	7' - 11 1/2"		SHOWER					GLASS
100	2' - 8"	10' - 0"		Luxlis					
101	2' - 8"	10' - 0"		Luxlis					
102	2' - 10"	10' - 0"	5' - 9"	Luxlis					
103	8' - 9 3/4"	10' - 0"		Vitrocsa					
104	3' - 0"	10' - 0"		Luxlis - Rasomuro555					
105	2' - 6"	10' - 0"	5' - 1"	Luxlis					
106	2' - 6"	10' - 0"		Luxlis					
107	2' - 6"	7' - 11 1/2"		SHOWER					GLASS
108	4' - 0"	10' - 0"	8' - 1"	Luxlis					
109	2' - 8"	10' - 0"	5' - 5"	Luxlis					
111	2' - 6"	7' - 11 1/2"		SHOWER					GLASS
112	2' - 8"	10' - 0"	5' - 5"	Luxlis					
113	6' - 0"	9' - 10"		Rimadesio - Velaria					
114	8' - 7 1/2"	10' - 0"		Vitrocsa					
115	3' - 0"	10' - 0"	6' - 1"	Luxlis					
116	3' - 0"	10' - 0"		Luxlis - Rasomuro555					
118	2' - 8"	10' - 0"	5' - 5"	Luxlis					
119	2' - 6"	7' - 11 1/2"		SHOWER					GLASS
120	2' - 6"	7' - 11 1/2"		SHOWER					GLASS
121	2' - 0"	10' - 0"		Luxlis					
122	7' - 11 5/8"	10' - 0"		Vitrocsa					
123	3' - 0"	10' - 0"		Luxlis					
124	2' - 8"	7' - 10 1/2"		Luxlis					
125	3' - 0"	10' - 0"		Luxlis - Rasomuro555					
126	3' - 0"	10' - 0"		Luxlis - Rasomuro555					
127	7' - 10 7/8"	10' - 0"		Vitrocsa					
128	3' - 0"	10' - 0"		Luxlis					
129	3' - 6"	10' - 0"		Luxlis					
130	7' - 9 3/4"	10' - 0"		Vitrocsa					
131	2' - 8"	7' - 10 1/2"		Luxlis					
132	2' - 6"	7' - 11 1/2"		SHOWER					GLASS
133	2' - 8"	10' - 0"		SHOWER					GLASS
134	2' - 8"	10' - 0"		Luxlis					
135	2' - 8"	10' - 0"		Luxlis					
136	2' - 6"	7' - 11 1/2"		SHOWER					GLASS
137	2' - 6"	7' - 11 1/2"		SHOWER					GLASS
138	3' - 0"	10' - 0"		Luxlis					
139	3' - 0"	10' - 0"		Luxlis - Rasomuro555					
140	17' - 10"	8' - 0"	17' - 10"	TBD					
144	5' - 0"	10' - 0"							
147	2' - 10"	10' - 0"		Luxlis - Rasomuro555					
148	3' - 0"	8' - 0"		TBD					
215	2' - 8"	10' - 0"		Luxlis - Rasomuro555					FUTURE DOOR

GENERAL NOTES

1. EGRESS WINDOWS AND DOORS TO COMPLY WITH CODE PER 2012 IRC-R130.
2. STAIRS, HANDRAILS, AND GUARDRAILS TO COMPLY WITH CODE PER 2012 IRC-R311 & R312.
3. VISITABLE BATHROOM COMPLIES WITH THE REQUIREMENTS OF R320.3 OF THE COA ORDINANCE 20140130-021.
4. VISITABLE LIGHT SWITCHES, RECEPTACLES, AND ENVIRONMENTS CONTROLS SHALL COMPLY WITH THE REQUIREMENTS OF R320.4 OF THE COA ORDINANCE 20140130-021.
5. VISITABLE BATHROOM ROUTE WILL BE PROVIDED PER THE REQUIREMENTS OF R320.5 OF THE COA ORDINANCE 20140130-021.
6. VISITABLE DWELLING ENTRANCE IS PROVIDED PER THE REQUIREMENTS OF R320.6 OF THE COA ORDINANCE 20140130-021.

1102 West Texas Avenue
Midland, Texas 79701
432 .682 .1252
432 .682 .1257 *fax*

rwa
rhotenberry
wellen
architects

REGISTERED ARCHITECT STATE OF TEXAS

04/08/16

NOTE: Sheet is formatted to 30"x48". Scales are 25% of noted when printed on 11x17 paper.

Westlake Residence
3701 Westlake Drive
Austin, TX

JOB NO. 1342

DRAWINGTITLE

Basement

REVISIONS

△
△
△
△

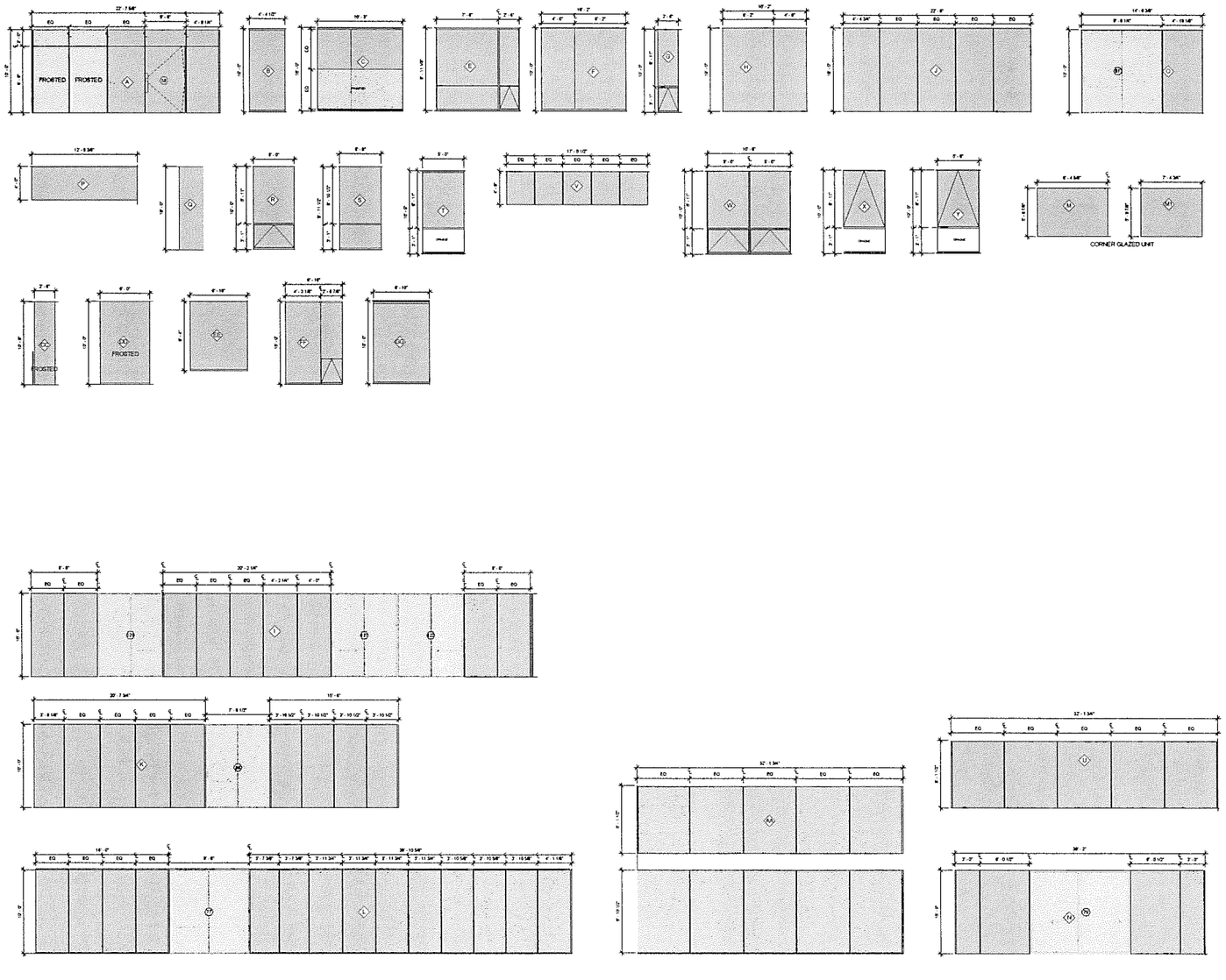
DATE 04/07/16

DRAWN BY NCL

CHECKED BY MTW

SHEET NO.

A15



GENERAL NOTES

1. EGRESS WINDOWS AND DOORS TO COMPLY WITH CODE PER 2012 IRC-R130.
2. DIMENSIONS SHOWN ARE TO FINISH FACE. ROUGH OPENING DIMENSION WILL BE DETERMINED UPON WINDOW MANUFACTURER SPECS.
3. GLAZING TYPE TO BE UNIFORM THROUGHOUT HOUSE. VERIFY GLAZING MANUFACTURER WITH ARCHITECT.
4. OPAQUE OR FROSTED GLAZING TO BE VERIFIED WITH ARCHITECT.

1102 West Texas Avenue
Midland, Texas 79701
432.682.1252
432.682.1257 fax

rwa rhotenberry weilen architects

REGISTERED ARCHITECT STATE OF TEXAS

04/08/16

NOTE: Sheet is formatted to 30"x48". Scales are noted when printed on 11x17 paper.

Westlake Residence
3701 Westlake Drive
Austin, TX

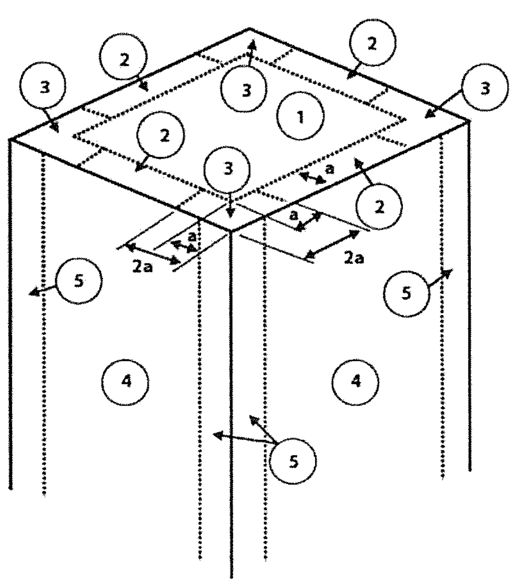
JOB NO.	1342
DRAWINGTITLE	Basement
REVISIONS	
DATE	04/07/16
DRAWN BY	NCL
CHECKED BY	MTW
SHEET NO.	A15.1

COORDINATION

1. Only large openings in structural framing members are shown on the structural drawings. However, all sleeves, embeds, inserts, openings and frames that are necessary for the work shall be provided. The Contractor shall coordinate with all trades sizes, locations and placement. All openings and embedded items which have an effect on the structure shall be submitted to the Engineer for review.
2. Refer to Architectural, Mechanical, Electrical and Plumbing drawings for floor elevations, location of depressed or elevated floor areas, slopes and drains.
3. Contractor shall coordinate the requirements for building equipment supported on or from the structure. Submittals identify all equipment including size, dimensions, clearances, accessibility, weights and reactions. Any deviations from specified equipment shall be noted on the submittals.
4. Shop drawings shall be prepared for all structural items and submitted for review by the Engineer. Contract Drawings shall not be reproduced and used as shop drawings. All items deviating from the Contract Drawings or from previously submitted shop drawings shall be noted.
5. The details designated as "Typical Details" apply generally to the Drawings in all areas where conditions are similar to those described in the details.
6. The design and provision of all temporary supports required for the execution of the contract such as guys, braces, shores, reshores, falsework, supports and anchors are not included in these drawings and shall be the responsibility of the Contractor. Temporary supports shall not result in the overstress or damage to the structure.

CODES

1. IBC 2012 International Building Code with City of Austin Ordinance No. 20130606-089 Amendments.
2. Structural Concrete: Building Code Requirements for Structural Concrete, American Concrete Institute, ACI 318-11.
3. Structural Steel: Steel Construction Manual, American Institute of Steel Construction, Thirteenth Edition. Specification for Structural Steel Buildings, AISC 360-10.



DESIGN LOADS

1. Live Loads

a.	Mechanical Rooms	125 psf
b.	Storage (minimum)	125 psf
c.	Roof	20 psf
d.	Garages (passenger vehicles only)	40 psf
e.	Passenger Vehicle load	3000 lbs
f.	Single Family Residential:	40 psf
g.	Balconies	40 psf
h.	Stairs	40 psf
i.	Partition at areas with 80 psf live load or less	15 psf
j.	Awnings or canopies	20 psf

2. Dead Loads include the self weight of the structural elements and the following superimposed loads:

a.	Ceiling and Mechanical at roof	10 psf
b.	Ceiling and Mechanical at floor	5 psf
c.	Roofing and rigid insulation	15 psf

3. Wind Loads

a. Wind Lateral Load on Structural Frame is based on the following:

i)	Ultimate Design 3-sec. gust Wind Speed, V_{ult}	115 mph
ii)	Wind Importance Factor, I	1.00
iii)	Wind Exposure	B
iv)	Internal Pressure Coefficient, GC_{pi}	±0.18
v)	Component & Cladding Design Pressures:	

Effective Area:	$\leq 10ft^2$	(Overhangs)
Zone 1	+14.9 psf; -23.6 psf	+10.9 psf; -19.7 psf
Zone 2	+14.9 psf; -41.1 psf	+10.9 psf; -48.1 psf
Zone 3	+14.9 psf; -60.8 psf	+10.9 psf; -80.9 psf
Zone 4	+23.6 psf; -25.6 psf	
Zone 5	+23.6 psf; -31.5 psf	

Effective Area:	$50ft^2$	(Overhangs)
Zone 1	+11.8 psf; -22.1 psf	+10.0 psf; -18.2 psf
Zone 2	+11.8 psf; -33.5 psf	+10.0 psf; -48.1 psf
Zone 3	+11.8 psf; -51.6 psf	+10.0 psf; -62.6 psf
Zone 4	+21.2 psf; -23.2 psf	
Zone 5	+21.2 psf; -26.6 psf	

Effective Area:	$>100ft^2$	(Overhangs)
Zone 1	+10.5 psf; -21.4 psf	+10.0 psf; -17.5 psf
Zone 2	+10.5 psf; -30.2 psf	+10.0 psf; -48.1 psf
Zone 3	+10.5 psf; -47.7 psf	+10.0 psf; -54.7 psf
Zone 4	+20.1 psf; -22.1 psf	
Zone 5	+20.1 psf; -24.5 psf	

NOTE:
- Zone 1 = Interior roof area not in Zones 2 or 3.
- Zone 2 = Perimeter roof area not in Zone 3 (8'-0" strips).
- Zone 3 = Corner roof areas where Zone 2 strips intersect.
- Zone 4 = Wall areas not in Zone 5.
- Zone 5 = Wall corner areas (8'-0" strips).

a. Calculate the effective area for each component & cladding element, as defined by ASCE 7, depending on length and location. Effective area shall be the maximum of the following:

Effective Area = Length x Tributary Width (OR) Length x (Length/3)

b. Interpolation of uplift pressures is allowed between effective areas.

4. Roof Snow Loads

a. Ground Snow Load 5 psf

5. Earthquake Loads

a. Seismic Lateral Load on Structural Frame is based on the following:

i)	Seismic Importance Factor, I	1.00
	Occupancy Category	II
ii)	Mapped Spectral Response Accelerations	
	S_S	0.063g
	S_1	0.033g
iii)	Site Class	B
iv)	Spectral Response Coefficients	
	S_{DS}	0.042g
	S_{D1}	0.022g
v)	Seismic Design Category	A
vi)	Basic Seismic-Force-Resisting System:	Steel Ordinary Concentrically Braced Frame
vii)	Design Base Shear	133 kips
viii)	Seismic Response Coefficient, C_S	0.013
ix)	Response Modification Factor, R	3.25
x)	Analysis ProcedureEquivalent Lateral Force	

6. Structural elements supporting elevators are designed based on published data for the following elevator types:

   a. Eclipse Home Elevator - Type # - [#]

7. Loading for mechanical rooms and kitchens are based on the weights of equipment and concrete pads as indicated on the contract documents. Any revisions in equipment type, size, or quantity shall be reported to the Architect immediately for verification of the structural design.
8. Floor live loads noted above have been reduced in accordance with the building code at the rate of .15 percent per square foot in excess of 150 square feet. Roof live load has not been reduced.

BUILDING MOVEMENTS

1. The building movements specified herein are anticipated to occur and shall be taken into account by the Contractor in the design, detailing, and installation of the building elements.
2. Spandrel beam deflections: Provisions shall be made in the building cladding for relative floor to floor vertical deflections of smaller of span/600 or ⅜".
3. Interior floor/roof deflections: Provisions shall be made in interior partitions and other elements supported by or attached to the floors or roofs for relative floor to floor vertical deflections of span/240.
4. Lateral building drift: Provisions shall be made in building cladding and other architectural finishes for relative floor to floor lateral deflections of story height/400.

TESTING LABORATORY SERVICES

1. Work specified herein shall be performed by a qualified independent Testing Laboratory, selected and paid by the Owner.
2. Pier drilling operation: Make continuous inspections to determine that the proper bearing stratum is obtained and utilized for bearing and that the shafts are clean and dry before pouring concrete.
3. Filling and Backfilling operation:
   a. Analyze backfill samples delivered by the contractor to determine compliance with gradation and quality requirements of the geotechnical report.
   b. Make in place compaction tests for moisture content, moisture density relationship, and density of materials in place. Perform one test for each 5000 square feet of area per lift.
4. Footing excavation: Inspect the excavations to determine that the proper bearing stratum is obtained and utilized for bearing and that excavations are properly clean and dry before concrete is placed.

rwa rhotenberry wellen architects
1102 West Texas Avenue
Midland, Texas 79701
432.682.1252
432.682.1257 fax

aec Architectural Engineers Collaborative

Sheffield Residence
3509 Westlake Drive
Austin, TX

JOB NO.	00000
DRAWING TITLE	GENERAL NOTES
REVISIONS	△ △ △ △
DATE	11/12/15
DRAWN BY	NK, JC
CHECKED BY	RL
SHEET NO.	S001

STATE OF TEXAS
SEN-GIN LIU
101153
LICENSED PROFESSIONAL ENGINEER

04.08.2016

5. Concrete inspection and testing:
   a. Secure composite samples of concrete at the jobsite in accordance with ASTM C172.
   b. Mold and cure three specimens from each sample in accordance with ASTM C31. Test specimens in accordance with ASTM C39. Two specimens shall be tested at 28 days for acceptance and one shall be tested at seven days for information.
   c. Perform one strength test (four cylinders) for each pour.
   d. Make one slump test for each set of cylinders following the procedural requirements of ASTM C143 and C172.
   e. Determine total air content of air entrained concrete in accordance with ASTM C231. Perform one test for each strength test.

6. Concrete Reinforcement: Inspect all concrete reinforcing steel and embedded metal assemblies prior to placement of concrete for compliance with Contract Documents and shop drawings. All instances of non-compliance shall be immediately brought to the attention of the contractor for correction, and if uncorrected, reported to the engineer.

7. Expansion Anchors: Provide continuous inspection of expansion bolt installation to ensure that holes are of the specified size, and that bolts are properly installed including application of minimum installation torques.

8. Structural steel, steel joists, and joist girders: Field inspection of proper erection of all members, visual examination of all field welding, visual inspection of all bolts, inspection of all shop fabricated members upon arrival at the jobsite for conformance with accepted fabrication and erection drawings, verification of welder's certificates.

EXCAVATION PROTECTION

1. The sides of all excavations greater than 5'-0" in depth shall be laid back to a slope of 1 horizontal to 1 vertical, unless the following applies:
   a. A steeper slope is allowed by the geotechnical engineer for the particular location and site conditions in question.
   b. A retention system is indicated on the Contract Drawings.
   c. An alternative protective system is submitted by the Contractor and allowed by the Owner.

2. Contractor shall submit Drawings and calculations sealed by a Registered Engineer licensed in the State of Texas for the design of any alternative protective systems. Alternative protective systems shall be designed to resist the soil pressures stipulated in the project geotechnical report prepared by Holt Engineering, Inc., dated July 20, 2015. In addition, the design shall consider surcharges created by construction equipment, excavation spoil, and other surface encumbrances.

3. Contractor shall comply with all Occupational Safety and Health Administration standards and all other regulatory agency standards regarding excavation safety.

BUILDING PAD PREPARATION

1. Structural fill material shall have a plasticity index between 3 and 18. Gradation of material shall be as follows:

Retained on 2½" screen	0%
Retained on 1½" screen	0% - 25%
Retained on ¾" screen	15% - 55%
Retained on ½" screen	45% - 75%
Retained on No. 40 mesh sieve	60% - 90%

2. Prior to placing fill material, remove all organic and other deleterious material from the existing subgrade for a distance of 3'-0" beyond building line. All exposed surfaces shall then be scarified to a depth of _____, watered as required and recompacted to a minimum of 95 percent of the maximum dry density as defined by ASTM D 698 (Standard Proctor Test) at a moisture content within ±3 percent of the optimum moisture content.

3. Structural fill shall be placed in 8 inch loose lifts, watered as required and compacted to a minimum of 95 percent of the maximum dry density as defined in ASTM D 698 at a moisture content within ±3 percent of the optimum moisture content.

4. Compaction and moisture content of subgrade and each lift of structural fill shall be inspected and approved by a qualified engineering technician, supervised by a Geotechnical Engineer.

5. Provide a 1 foot thick clay cap at perimeter of building to protect pad from moisture intrusion. Cap can be formed of on-site clays, placed in 6" lifts, and compacted to 90 percent of the maximum dry density as defined by ASTM D 698 (Standard Proctor Test). Cap shall slope away from building.

6. Slab on grade shall be placed over a minimum of 1 ft. structural fill, except where slab areas are excavated down to limestone rock. In these areas, the slab is soil supported on a gravel capillary barrier consisting of a minimum of 6 inches of $\frac{3}{8}$" diameter (pea size) uniformly graded washed gravel.

7. Provide a 10 mil polyolefin vapor barrier. Place vapor barrier in accordance with manufacturer's recommendation on top of structural fill.

8. Building pad preparation information is based on a geotechnical report provided by Holt Engineering, Inc dated July 20, 2015.

CONTROLLED BACKFILL

1. Backfill material shall have a plasticity index between 3 and 18.

2. Fill shall be placed in lifts not to exceed 6 inches.

3. Fill shall be compacted at the optimum moisture content (±3%) to between 90 and 95 percent of the maximum dry density per ASTM D698.

4. Compaction and moisture content of controlled backfill shall be verified by an independent testing laboratory.

5. The top 1 ft of material below the ground surface shall consist of relatively impervious material, with a liquid limit between 40 and 50 percent and a plasticity index between 20 and 30. This material shall be placed in 6" lifts and compacted at optimum moisture content, to 95 percent of the maximum density per ASTM D698.

6. Backfill material shall not be placed against foundation walls until all supporting slabs, beams, struts, etc., have attained their 28 day design strength unless proper bracing is installed.

7. Where backfill is required on both sides of a structure or building element, backfill shall be placed simultaneously along both sides so that the backfill height on one side does not exceed the height on the opposite side by more than 4'-0".

8. Design of basement and retaining walls is based on equivalent hydrostatic pressure of 45 pcf, assuming free draining backfill and use of perforated drain pipe in accordance with the geotechnical report prepared by Holt Engineering, Inc. dated July 20, 2015.

DRILLED PIERS

1. Pier design is based on an allowable loading of 15,000 psf in end bearing and 1,250 psf in side friction in accordance with the geotechnical report dated July 20, 2015 by Holt Engineering, Inc.

2. Bearing stratum shown on the pier detail 1/S302, is tan limestone.

3. Piers not specifically located on the plan shall be located on centerline of column above. Where no column occurs, locate on centerline of wall or beam.

4. Provide dowels from piers into concrete above using same bar size and number as shown for pilaster above. Where no pilaster occurs, use dowels of same size and number as pier reinforcing steel. Extend dowels 30 bar diameters into pier and beam, wall, pilaster or column u.n.o.

5. Elevation of top of piers, unless noted otherwise on the drawings is at the bottom of the deepest intersecting beam or wall supported by the pier.

6. Reinforcing cage shall be held securely away from earth at sides and bottom by sets of 3 spacers at a maximum spacing of 8-ft. along the length of the cage and 1'-0" from the bottom.

7. Pier reinforcing and concrete shall be placed immediately after drilling operations are complete; in no case shall a pier be drilled that cannot be poured by the end of the workday.

8. See plans for pier sizes, reinforcing, and depth.

9. The contractor shall verify depths of piers before pier steel is cut. Pier steel may be delivered to the jobsite in standard lengths and cut as required. Provide 64 bar diameter laps in all vertical pier reinforcing.

10. Reinforcing steel shop drawings shall include placing drawings for templates to set dowels in piers.

11. Top of pier shall be of the specified diameter. Form top of pier if required to maintain the specified diameter. Any concrete extending beyond the specified diameter shall be removed.

12. Temporary steel casing may be required during pier drilling operations. Prior to the placement of concrete, any seepage water shall be removed from the pier holes. Special construction procedures in accordance with ACI 336.1-98 and ACI 336.3R-98 and specifications shall be followed during extraction of the casing and during concrete placement.

13. Contractor shall include in bid documents, unit-costs for casing if required and unit-cost for greater and lesser depth of drilling for each pier size. Base bids shall be for cased piers.

14. All piers shall be inspected by a representative of Holt Engineering, Inc. in order to ensure that the proposed bearing material has been reached in accordance with the recommendations given in the geotechnical report.

15. The contractor shall make and maintain accurate records of the drilled pier depths, bearing stratum, depth of penetration into bearing stratum, diameter and location (including off center eccentricities), and shall submit this information to the Engineer.

CONCRETE FOOTINGS

1. Concrete footing design is based on an allowable net bearing capacity of 8,000 psf in accordance with the geotechnical report dated July 20, 2015 by Holt Engineering, Inc.

2. Bearing stratum shown on the footing details is tan limestone.

3. Footings not specifically located on the plan shall be located on centerline of pilaster or column above. Where no pilaster or column occurs, locate on centerline of wall or beam.

4. Provide dowels from footings into concrete above using same bar size and number as shown for pilaster or column above. Where no pilaster or column occurs, use 4-#7 dowels. Extend dowels 30 bar diameters into pier and wall, beam, pilaster or column u.n.o.

5. Elevation of top of plinths/footings, unless noted otherwise on drawings, is at the bottom of the deepest intersecting beam or wall supported by the footing.

6. Footing excavations shall be to neat lines and shall be free of loose or wet materials.

7. Footing reinforcing and concrete shall be placed immediately after excavations are complete; in no case shall a footing be excavated that cannot be placed by the end of the workday.

8. See plans and schedules for footing sizes, reinforcing and depths.

9. Reinforcing steel shop drawings shall include placing drawings for templates to set dowels in footings.

10. All footings shall be inspected by a representative of Holt Engineering, Inc. in order to ensure that the proposed bearing material has been reached in accordance with the recommendations given in the geotechnical report and that the footing has been constructed to specified size, with detailed reinforcing, and to specified tolerances.

rwa rhotenberry wellen architects
1102 West Texas Avenue
Midland, Texas 79701
432.682.1252
432.682.1257 fax

Sheffield Residence
3509 Westlake Drive
Austin, TX

JOB NO. 00000
DRAWING TITLE
GENERAL NOTES
REVISIONS
△
△
△
△
DATE 11/12/15
DRAWN BY N.K., J.C.
CHECKED BY R.L.
SHEET NO.
S002

STATE OF TEXAS
SEN-GIN LIU
101153
LICENSED
PROFESSIONAL ENGINEER

04.08.2016

CAST IN PLACE CONCRETE

1. Cast in place concrete shall meet the following requirements:

Class	28 Day Strength	Aggregate Type	Aggregate Size	Slump	Use
A	4000 psi	NWC33	1"	5"-7"	Piers
B	4000 psi	LWC330	¾"	3"-5"	Conc. on metal deck
C	4000 psi	NWC33	1"	3"-5"	Slabs on grade, grade beams and footings

2. Fly ash shall not be used in architecturally exposed concrete.

3. Provide 5 percent plus or minus 1½ percent of entrained air in concrete permanently exposed to the weather and elsewhere at the contractors option. Do not use entrained air in drilled piers.

4. Horizontal construction joints in concrete pours shall be permitted only where indicated on the drawings. All vertical construction joints shall be made in the center of spans in accordance with the typical details. Contractor shall submit proposed locations for construction joints not shown on drawings for review by the Architect and Structural Engineer. Additional construction joints may require additional reinforcing as specified by the Engineer which shall be provided by the contractor at no additional cost to the owner.

5. Embedded conduits, pipes, and sleeves shall meet the requirements of ACI 318-11, Section 6.3, including the following:

   a. Conduits and pipes embedded within a slab, wall, or beam (other than those passing through) shall not be larger in outside dimension than ⅓ the overall thickness of the slab, wall or beam in which they are embedded.
   b. Conduits, pipes and sleeves shall not be spaced closer than three diameters or widths on center.

6. Concrete pours shall not exceed 5000 square feet or 100 linear feet on each side without prior approval by the Architect for each pour.

SLAB ON GRADE

1. See plan and detail 14/S3.01 for slab on grade pour strips.

2. Provide control joints or construction joints at the centerlines of all columns and at 15 feet on center maximum in both directions. Provide additional joints such that the resulting aspect ratio does not exceed 1:1.5

3. Tooled, sawcut, or preformed joints shall be ¼ the depth of the slab. Sawcut joints must be made within 12 hours after the slab has been placed.

4. Metal keyway forms or bulkheads shall be removed prior to placement of adjacent pours.

5. Refer to "Building Pad Preparation" section for fill requirements.

6. Erection equipment that imposes any concentrated load in excess of 2,000 lbs acting over a 2'-6"x2'-6" area may not be used on the slab-on-grade. Equipment used that will exceed this loading shall be staged away from the building slab and means for doing so shall be included in base bids.
7. Notes 1-3 Do not apply to the 10" structural slabs on grade, refer to drawings for location.

CONCRETE REINFORCING

1. Reinforcing steel shall be deformed new billet steel bars in accordance with ASTM A615 Grade 60.

2. Detailing of reinforcing steel shall conform to the American Concrete Institute Detailing Manual.

3. All hooks and bends in reinforcing bars shall conform to ACI detailing standards unless shown otherwise.

4. Provide reinforcing bars in accordance with the bar bending diagram if bar types are specified. In unscheduled beams, slabs, columns and walls detail reinforcing as follows:

   a. Lap top reinforcing bars at mid span.
   b. Lap bottom reinforcing bars at the supports.
   c. Lap vertical bars in columns and walls only at floor lines, unless noted otherwise.
   d. Refer to lap splice schedule for splice length requirement.
   e. Reinforcement labeled as continuous shall be lap spliced 38 bar diameters as a minimum, unless otherwise noted.
   f. Provide standard hooks in top bars at cantilever and discontinuous ends of beams, walls and slabs.
   g. Provide corner bars for all horizontal bars at the inside and outside faces of intersecting beams or walls. Corner bars are not required if top, bottom, or horizontal bars are hooked.

5. Welding of reinforcing steel will not be permitted.

6. Heat shall not be used in the fabrication or installation of reinforcement.

7. Reinforcing steel clear cover shall be as follows:

a. Grade beams -	1½" top, 3" bottom, 2" side (formed), 3" side (placed against earth)
b. Drilled piers -	3" bottom, 3" sides
c. Walls -	Refer to Details

CONCRETE JOINT SEALANT

1. Concrete joint sealant includes routing, sawcutting, surface preparation and application of waterproof concrete joint sealant. Sealant used where exposed to pedestrian or vehicle traffic shall be suited for traffic. Repair deteriorated concrete adjacent to crack or joint as required.

2. Joint sealing shall be performed by workers qualified to perform the work. As a minimum, the foreman shall have not less than two years experience with structural concrete repairs.

3. Joints shall be sealed with a waterproof concrete joint sealant product from one of the following manufactureres (or an equivalent product submitted to the engineer for approval):

   a. Sto
   b. Euclid
   c. Master Builders
   d. Thoro
   e. Dayton Superior

4. Existing concrete shall be prepared as recommended by the manufacturer including but not limited to the following:

   a. Remove any existing joint sealant from crack or joint
   b. Saw cut or route if necessary to clean joint
   c. Repair damaged concrete as required

5. Apply joint sealant in accordance with the manufacturer's directions.

6. Apply sealant within working time limits and temperatures identified by the manufacturer.

EPOXY MORTAR

1. Work related to epoxy mortar shall be performed in accordance with ACI 503.4.

2. Epoxy mortar shall comply with ASTM C881, Type III. If the proposed mortar is not a prepackaged product, submit the proposed mortar mix to the testing agency for review and approval. Epoxy mortars or mortar resins offered by the following manufacturers are acceptable:

   a. Sika Corporation
   b. Euclid Chemical Company
   c. Master Builders

3. All surfaces to receive mortar shall be free of all loose and unsound material, oil, grease, wax, or other bond inhibiting agents. Use sandblast or waterblast to clean surface. Acid etching shall not be used.

4. Mix, place and compact mortar in accordance with manufacturer's recommendations.

5. Finish mortar to match texture and color of surrounding concrete. Provide test samples as required until adequate match can be demonstrated.

6. All surfaces shall be inspected by the testing agency prior to mortar application to ensure that surfaces have been properly prepared.

EXPANSION ANCHORS

1. Expansion anchors shall only be used where specified on the drawings. The contractor shall obtain approval from the engineer of record prior to using the anchors for missing or misplaced cast-in-place anchors.

2. Unless otherwise noted, size and depth of the expansion anchors specified in the drawings are based on the Hilti Fastening System products - Hilti Kwik Bolt 3 for general applications, and Kwik Bolt TZ for overhead applications.

3. Substitution of expansion anchor products with similar capacities shall be submitted to the engineer of record for approval.

4. Expansion anchors of the size and embedment shown on the Drawings shall be installed in accordance with the Contract Documents, the manufacturer's recommendations, and the manufacturer's current ICBO report for the anchor. If conflicts exist between these referenced documents, the most stringent requirements shall govern.

5. The Contractor shall locate all existing reinforcing steel and other embedded items contained in the concrete using non-destructive methods and shall position anchor locations to avoid conflicts with existing embedded items. Anchor locations can be adjusted by a maximum of 1½" from detailed locations to avoid conflicts, unless noted otherwise.

6. Based on field verified locations of reinforcing steel and embedded items, the Contractor shall create templates for each anchor group. Submit template dimensions for review prior to fabrication of connection plates.

7. Holes for anchors shall be drilled in a continuous operation using the bit type and size recommended by the anchor manufacturer. Holes shall be drilled perpendicular to the concrete surface and shall not be enlarged or redirected at any point along its length. All debris shall be blown out of the holes with compressed air after drilling.

8. All abandoned holes shall be filled with non-shrink grout.

9. Holes in connection plates shall be no more than $\frac{1}{16}$" larger than the anchor diameter. If larger holes are required for erection purposes, Contractor shall provide ¼" x 3" x 3" plate washers sufficiently welded to the connection plate to transfer the specified load.

10. Installation of expansion anchors shall be continuously inspected by the testing agency to ensure that holes are of specified size, and that bolts are properly installed including application of minimum installation torques.

ADHESIVE ANCHORS

1. Adhesive anchors shall only be used where specified on the drawings. The contractor shall obtain approval from the engineer of record prior to using the anchors for missing or misplaced cast-in-place anchors.

2. Unless otherwise noted, size and depth of the adhesive anchors specified in the drawings are based on HAS rods epoxy doweled with HY 200, Hilti Fastening Systems.

1102 West Texas Avenue
Midland, Texas 79701
432.682.1252
432.682.1257 fax
rwa
rhotenberry wellen architects

aec Architectural Engineers Collaborative
Austin, Tx 78701
FIRM REG #: F-2985
AEC JOB#: 13067

STATE OF TEXAS
SEN-GIN LIU
101153
LICENSED
PROFESSIONAL ENGINEER
04.08.2016

Sheffield Residence
3509 Westlake Drive
Austin, TX

JOB NO.	13067
DRAWINGTITLE	GENERAL NOTES
REVISIONS	△ △ △ △
DATE	04/08/16
DRAWN BY	NK
CHECKED BY	RL
SHEET NO.	S003

3. Substitution of expansion anchor products with similar capacities shall be submitted to the engineer of record for approval.

4. Adhesive anchors of the size and embedment shown on the Drawings shall be installed in accordance with the Contract Documents, the manufacturer's recommendations, and the manufacturer's current ICBO report for the anchor. If conflicts exist between these referenced documents, the most stringent requirements shall govern.

5. The Contractor shall locate all existing reinforcing steel and other embedded items contained in the concrete using non-destructive methods and shall position anchor locations to avoid conflicts with existing embedded items. Anchor locations can be adjusted by a maximum of 1 inch from detailed locations to avoid conflicts, unless noted otherwise.

6. Based on field verified locations of reinforcing steel and embedded items, the Contractor shall create templates for each anchor group. Submit template dimensions for review prior to fabrication of connection plates.

7. Holes for anchors shall be drilled in a continuous operation using the bit type and size recommended by the anchor manufacturer. Holes shall be drilled perpendicular to the concrete surface and shall not be enlarged or redirected at any point along its length. All debris shall be blown out of the holes with compressed air after drilling.

8. All abandoned holes shall be filled with non-shrink grout.

9. Holes in connection plates shall be no more than 1/16" larger than the anchor diameter. If larger holes are required for erection purposes, Contractor shall provide 1/4" x 3" x 3" plate washers sufficiently welded to the connection plate to transfer the specified load.

10. Installation of adhesive anchors shall be continuously inspected by the testing agency to ensure that holes are of specified size, and that bolts are properly installed.

ADHESIVE DOWELS

1. Adhesive dowelling system shall be one of the following products: Hilti "HY 200", Hilti "RE 500-SD" epoxy system. Install dowels in accordance with the manufacturer's instructions.

2. Clean out holes with compressed air after drilling holes.

3. Prior to drilling holes for dowels, locate existing reinforcing steel with a Pachometer (R-Meter) or by drilling 1/4" diameter pilot holes. Relocate bolt holes as required to avoid existing reinforcement.

4. Abandoned holes shall be completely filled with adhesive dowelling compound.

STRUCTURAL STEEL

1. Structural Steel shall conform to ASTM A992 or A572, grade 50 except where A36 is noted on plan, except that miscellaneous plates, angles, and channels may be A572, grade 50 or A36. Steel pipe shall conform to ASTM Specification A 501 or ASTM A 53, Type E or S, Grade B. Steel tube shall conform to ASTM Specification A 500, Grade B, Fy 46 ksi.

2. Anchor rods shall conform to ASTM F1554 grade 36 ksi.

3. Column base plates shall be grouted with a non-shrink, high strength nonmetallic grout conforming to ASTM C827, and shall have a compressive strenght at 28 days of 5000 psi. Pre-grouting of base plates will not be permitted.

4. Studs shall be Nelson studs type S3L (Fu=65 ksi) or acceptable equal. Studs shall be made from cold drawn steel conforming to ASTM A108.

5. Deformed bar anchors shall be Nelson D2L or KSM deformed bar anchors (or acceptable equal) and shall be made from cold drawn wire per STM A490 conforming to ASTM A108 with minimum yield strength of 70 Ksi. Anchors shall be automatically and welded with suitable welding equipment in the shop or in the field. Welding shall be in accordance with the recommendations of Nelson Stud Company or KSM Welding Company.

6. Structural steel detailing, fabrication, and erection shall conform to the AISC "Specification for Steel Buildings" and the AISC "Code of Standard Practice for Steel Buildings and Bridges". Typical connection details are indicated in the drawings. The fabricator shall prepare drawings based on these details. If alternate connection designs are used, the fabricator shall have a registered professional engineer prepare the connection designs. Such connection shall bear the engineer's seal and shall be submitted with shop drawings.

7. Splicing of structural steel members is prohibited without prior approval of the Engineer as to location and type of splice to be made. Any member having splice not shown and detailed on shop drawings will be rejected.

8. All welds denoted as moment connection or full penetration weld shall be ultrasonically or x-ray certified by an independent testing agency.

9. Contractor shall coordinate structural steel fireproofing requirements. All interior structural steel, including steel joists, scheduled or indicated to receive spray applied fireproofing shall be delivered to the project site unprimed. Steel exposed to corrosive conditions after installation shall be primed with a protective coating which does not diminish the bond between the spray applied fireproofing, and the steel substrate. Any primer, and/or coating applied to structural steel shall be approved for use in the applicable U.L. Fire Resistance Assembly used on the project. Contractor shall protect any unprimed structural steel from detrimental effects of corrosion, as required, until the steel is enclosed and protected by the new construction.

10. Shop painting: Paint structural steel with one coat of manufacturer's standard red oxide primer applied at a rate to provide a uniform dry film thickness of 2.5 mils.

11. Contractor must fabricate and erect steel in accordance with OSHA Safety requirements, 29 CF part 1926 Safety for Steel Erection, Final Rule.

STRUCTURAL STEEL CONNECTIONS

1. Welding shall conform to ANSI/AWS D1.1, latest edition.

2. Bolts conform to ASTM A325. Bolts shall be designed using values for bearing type bolts with thread allowed in the shear plane.

3. Structural steel connections not specifically detailed on the Drawings shall be designed and detailed by the Contractor under the direct supervision of a registered engineer licensed in the State of Texas. Sealed calculations for all connections designed by the Contractor shall be submitted for the Architect's files. Connections that meet the requirements and assumptions presented in our schematic connection details and table can be used at the discretion of the Contractor. The Contractor shall take full responsibility in confirming that the connection tables are used within their limitations and assumptions outlined in the details and notes.

4. Beam connections shall be designed and detailed as follows, unless noted otherwise on the Drawings:

   a. Connections shall be AISC type 2 simple framing connections.
   b. In general, shop connections shall be bolted or welded and field connections shall be bolted.
   c. Where indicated, connections shall be designed for the scheduled shear force, the shear force indicated on the Drawings as "V= ", and the horizontal force indicated as "H= ".
   d. If not indicated on the Drawings, connections shall be designed for 65 percent of the total load capacity for the beam span shown in the beam tables in Part 3 of the AISC Manual, fourteenth edition.
   e. The minimum number of rows of bolts shall be 1/3 of the beam depth with any fraction be rounded to the next higher number.
   f. Bolts shall be "snug tight", U.N.O.
   g. Short slotted holes shall be permitted provided washers are installed in accordance with AISC requirements. Washers shall be hardened where A325 bolts are utilized. Long slotted holes are not permitted unless the connection is designed as slip-critical or as specified otherwise.

5. Wind brace and truss connections shall be designed and detailed as follows, unless noted otherwise on the Drawings:

   a. Connections shall be welded.
   b. Connections shall be designed and detailed for the forces shown on the Drawings.
   c. If forces are not indicated on the Drawings, connections shall be designed to develop the full tensile capacity of the members.

6. For connections not specifically addressed by these notes or the Drawings, provide fillet welds at all contact surfaces sufficient to develop the tensile strength of the smaller member at the joint.

7. Moment connections indicated on Drawings as ◀▶ shall be welded to develop the full capacity of the member on both sides of supporting member.

8. Roof edges angles shall be continuous and shall be spliced only at supports. Splices shall be butt-welded to develop full capacity of the member.

9. Fillet welds with no size specified shall be 3/16", or minimum size required by AISC, whichever is larger.

COMPOSITE STEEL BEAM NOTES

1. Composite steel beams do not require shoring to support the weight of the wet concrete.

2. Headed studs shall be 3/4" diameter x 3 1/2" long.

3. Place the number of studs shown on plan as follows:

   a. Uniform distribution: for beams where only a total number of studs is specified place studs at a uniform spacing between the ends of the beam.
   b. Segmented distribution: for beams supporting other beams, with studs noted between beam reactions and/or the ends of the beam, place studs at a uniform spacing between beam reactions and/or the beam ends.

4. Headed studs shall be placed in a single row where possible. Where additional studs are required beyond those that can be placed in a single row, place studs in pairs starting towards the nearest end of the beam. Refer to stud placement diagram in typical details. The contractor shall be responsible for determining the proper headed stud layout for each beam prior to installation of the studs in the field.

5. Minimum number of studs are called out on plan. Additional studs may be needed to meet the maximum stud spacing requirements shown on the shear stud placement diagram.

COMPOSITE METAL DECK AND CONCRETE SLAB

1. Composite metal deck shall be 2" deep, 20 gauge deck, Type VLI with an 12" rib pattern. Minimum positive section modulus shall be 0.341 in^3 per linear foot of deck. Minimum negative section modulus shall be 0..346 in^3 per linear foot of deck. Min. Yield strength shall be 50 ksi.

2. Composite metal deck shall be galvanized per ASTM A525, class G60 coating.

3. Total slab thickness consisting of composite metal deck and concrete fill shall be 4 1/2".

4. Deck shall be continuous over 4 or more supports so as not to require any intermediate shoring to support construction loads and wet concrete, unless noted otherwise. Two span deck shall not be used unless approved by EOR. Contractor may provide properly designed heavier gauge deck installed in single span lengths if desired to eliminate shoring requirements.

5. Reinforce the slab over the composite deck with W2.1xW2.1 WWM chaired to be located 1" below the top of the slab. Provide a 6'-0" wide extra layer of mesh over all interior beams and girders spanning parallel to the deck span.

6. See detail 4/S504 for metal edge forms.

7. Slabs over composite deck shall be placed and finished to provide a floor within specified tolerances. Slab thicknesses may vary away from the columns due to deflections of the beams and deck.

METAL ROOF DECK

1. Steel Roof Deck shall be 1 1/2" deep, type B, 20 gauge deck with 36" coverage. Minimum positive section modulus shall be 0.234 in^3 per linear foot of deck. Minimum negative section modulus shall be 0.247 in^3 per linear foot of deck.

2. Roof deck shall be galvanized with a class G60 coating.

3. Roof deck shall be continuous over four or more supports.

rhotenberry wellen architects
1102 West Texas Avenue
Midland, Texas 79701
432.682.1252
432.682.1257 fax

aec Architectural Engineers Collaborative
FIRM REG #: F-1985

Sheffield Residence
3509 Westlake Drive
Austin, TX

JOB NO. 00000
DRAWING TITLE
GENERAL NOTES
REVISIONS
△
△
△
△
DATE 11/12/15
DRAWN BY N.K., J.C.
CHECKED BY R.L.
SHEET NO.
S004

STATE OF TEXAS
SEN-GIN LIU
101153
LICENSED
PROFESSIONAL ENGINEER
04.08.2016

4. Roof deck connections shall be as follows:

   a. Install powder-actuated and screw fasteners according to the manufacturer's recommendations.
   b. Powder-actuated fasteners shall be manufactured from AISI modified steel, austempered to a Rockwell C Hardness of 52-58. Screw frame fasteners shall be manufactured from Grade 1010 to 1022 to 10B08 to 10B22 carbon steel per STM A510.
   c. Powder-actuated fasteners shall have full-tip knurled shanks and minimum 12-mm diameter steel washers. Screw frame fasteners shall have wave form cutting edge self-drilling tips and Hex Washer Heads.
   d. Powder-actuated and screw frame fasteners shall be zinc plated to a thickness of 5mm in accordance with ASTM B633, Sc. 1 Type III.
   e. Powder-actuated and screw frame fasteners shall be SDI listed for diaphragm design and uplift, UL and FM listed for fire resistance and wind uplift. Sidelap connectors shall be FM listed for wind uplift.
   f. 36 inch wide deck sheets shall be attached to all deck supports using 4 approved Hilti frame fasteners (a fastener at each sidelap and at every other flute). Fasteners shall be Hilti X-HSN 214 or X-ENP-19 powder-actuated fasteners or Hilti S-MD 12-24x1-5/8 HWH5 screw fasteners. At wind braces, sheets shall be fastened to deck supports using 7 fasteners per sheet (a fastener at each sidelap and at every flute).
   g. Approved sidelap connectors shall be Hilti S-SLC 01 M HWH or S-SLC 02 M HWH sidelap.
   h. The installer that will be using the tools to attach the powder-actuated the powder-actuated frame fasteners shall be trained and certified by fastener manufacturer's representative on the general use of powder-actuated technology and fastening guidelines for the attachment of steel deck. The installer that will be using the tools to attach the screw fasteners shall be trained by fastener manufacturer's representative on the proper tools and fastening guidelines for the attachment of steel deck.
   i. Within 15 ft from the building perimeter, the deck sheets shall be fasteners to all supports at each flute.
   j. At side laps: 2 sidelap connectors equally spaced at 3 equal spaces between supports

5. Power driven fasteners shall be selected by the contractor for the combinations of deck gauge and deck support member thickness. Submit proposed fasteners with complete manufacturer's information, including diaphragm shear values for Engineer's review.

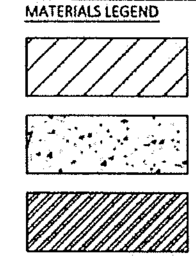
6. Ceilings, mechanical, electrical, & plumbing systems shall not be supported by the metal roof deck.

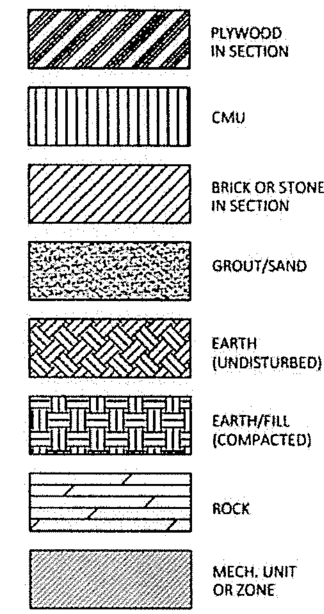
7. Submittal: Submit deck layout plans and details indicating deck type, fastening methods and layout, support locations, projections, openings and reinforcement, and any other pertinent details and accessories.

STRUCTURAL ABBREVIATIONS

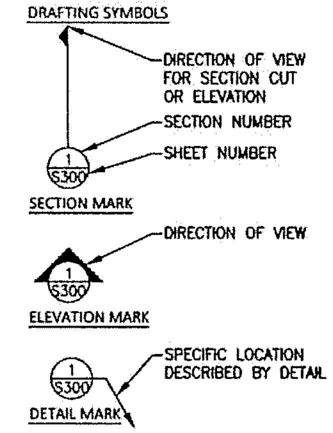
ADDITIONAL	ADD'L.
ADJACENT	ADJ.
AGGREGATE	AGGR.
ALTERNATE	ALT.
ANCHOR ROD	A.R.
ARCHITECT(URAL)	ARCH('L).
AIR CONDITIONER	A/C
AIR HANDLING UNIT	AHU
APPROXIMATE(LY)	APPORX.
AXIAL LOAD	P
BACK FACE	B.F.
BEAM	BM.
BEARING	BRG.
BETWEEN	BTWN.
BLOCKING	BLKG.
BLOCK-OUT	B.O.
BOTTOM	BOT.
BOTTOM OF STEEL	B.O.S.
BRICK LEDGE	BR.L.
BRIDGING	BRDG.
BUILDING	BLDG.
BUILDING LINE	B.L.
CAST-IN-PLACE	C.I.P.
CENTER LINE	C.L. OR ℄
CENTER LINE OF STEEL	C.L.S.
CENTER OF GRAVITY	C.G.
CLEAR(ANCE)	CLR.
COLUMN	COL.
COMPRESSION	C OR COM
CONCRETE	CONC.
CONCRETE MASONRY UNIT	C.M.U.
CONNECTIONS	CONX(S).
CONTINUOUS	CONT.
CONTRACTOR	CONTR.
CONTROL JOINT	CT.J.
CONSTRUCTION	CONST.
CONSTRUCTION JOINT	C.J.
COVER PLATE	COV. PL.
DEFORMED BAR ANCHOR(S)	DBA('S).
DETAIL	DET.
DEAD LOAD	D.L.
DIAGONAL	DIAG.
DIAMETER	DIA.
DIMENSION(S)	DIM(S).
DRAWING(S)	DWG(S).
DOUBLE	DBL.
DOUBLE EXTRA STRONG	XXS
DOWEL(S)	DWL(S).
EACH	EA.
EACH FACE	E.F.
EACH WAY	E.W.
ELECTRICAL	ELEC.
ELEVATION	EL.
ELEVATOR	ELEV.
EMBEDMENT	EMBED.
ENGINEER	ENGR.
EQUAL	EQ.
EQUIPMENT	EQUIP.
EXPANSION	EXP.
EXPANSION JOINT	E.J.
EXISTING	EXIST.
EXTERIOR	EXT.
EXTRA STRONG	XS
FACE TO FACE	F. TO F.
FABRICATE(ION)(OR)	FAB.
FAR SIDE	F.S.
FINISH(ED)	FIN(D')
FINISHED FLOOR	F.F.
FIREPROOF	F.P.
FLANGE	FLG.
FLOOR	FL.
FLOOR DRAIN	F.D.
FOOTING	FTG.
FOUNDATION	FDN.
GALVANIZED	GALV.
GENERAL	GEN.
GLUE LAMINATED TIMBER	GLULAM
GRADE	GR.
GRADE BEAM	GR.BM.
HOT DIP(PED)	H.D.
HEADED STUD(S)	H.S.
HEADER	HDR.
HEIGHT	HT.
HORIZONTAL	HORIZ.
HOOK	HK.
INSIDE DIAMETER	I.D.
INSIDE FACE	I.F.
INTERIOR	INT.
INTERMEDIATE	INTERM.
JOINT	JT.
JOIST(S)	JST(S).
LAMINATED VENEER LUMBER	LVL
LIGHTWEIGHT	LWT.
LIVE LOAD	L.L.
LONGITUDINAL	LONG.
LONG LEG HORIZONTAL	LLH.
LONG LEG VERTICAL	LLV.
LONG SIDE HORIZONTAL	LSH.
LONG SIDE VERTICAL	LSV.
MANUFACTURE(R)	MFR.
MASONRY	MAS.
MATERIAL	MAT'L.
MECHANICAL	MECH('L).
METAL	MTL.
MEZZANINE	MEZZ.
MIDDLE	MID.
MISCELLANEOUS	MISC.
MOMENT	M.
MOMENT CONNECTION(S)	M.C.
NEAR FACE	N.F.
NOMINAL	NOM.
NON-SHRINK	N.S.
NORMAL WEIGHT	N.W.
NOT IN CONTRACT	N.I.C.
NOT TO SCALE	N.T.S.
ON CENTER	O.C.
OPENING(S)	OPNG(S).
OPPOSITE	OPP.
OPPOSITE HAND	O.H.
ORIENTED STRAND BOARD	OSB
OUTSIDE FACE	O.F.
OUTSIDE DIAMETER	O.D.
PARALLEL	PAR.
PARALLEL STRAND LUMBER	PSL
PENETRATION	PEN.
PERPENDICULAR	PERP.
PIECE	PC.
PLATE	PL. OR ℄
PLYWOOD	PLYWD.
POINT	PT.
POST-TENSION(ED)	P.T.
POUND(S) X1000	KIP(S)
POUNDS PER LINEAR FOOT	PLF
POUNDS PER SQUARE FOOT	PSF
POUNDS PER CUBIC FOOT	PCF
POUNDS PER CUBIC YARD	PCY
PRECAST CONCRETE	P/C
PREFABRICATED	PREFAB.
PRELIMINARY	PRELIM.
PRESSURE	PRESS.
PROJECT(ION)	PROJ.
RADIUS	R.
REFER TO / REFERENCE	REF.
REINFORCED CONCRETE PIPE	RCP.
REINFORCE(ING)(ED)(MENT)	REINF.
REMAINDER	REM.
REQUIRE	REQ.
REQUIRED	REQ'D
RETURN	RET.
ROOF DRAIN	R.D.
ROUGH OPENING	R.O.
ROUND	RND.
SCHEDULE(D)	SCHED.
SECTION	SECT.
SHEAR FORCE	V
SHEET	SHT.
SIMILAR	SIM.
SPACE(S)(ING)	SPA.
SPECIFICATION(S)	SPEC(S).
SPECIFIED	SPEC'D
SQUARE	SQ.
STAINLESS STEEL	S.S.
STANDARD	STD.
STEEL	STL.
STIFFENER	STIFF
STRAIGHT	STR.
STIRRUPS	STIR
STRUCTURE OR STRUCTURAL	STRUCT.
SUPPORT(S)	SUPT(S)
TENSION	T
THICK(NESS)	THK.
TONGUE AND GROOVE	T&G
TOP AND BOTTOM	T&B
TOP OF BEAM	T.O.BM.
TOP OF FOOTING	T.O.FTG.
TOP OF PIER	T.O.PIER
TOP OF PIER CAP	T.O.P.C.
TOP OF STEEL	T.O.S.
TOP OF STRUCTURAL CONCRETE	T.O.S.C.
TOP OF WALL	T.O.W.
TREATED	TRTD.
TYPICAL	TYP.
UNLESS OTHERWISE NOTED	U.O.N.
VERTICAL	VERT.
VOLUME	VOL.
WATER STOP	W.S.
WELDED WIRE MESH	W.W.M.
WIND BRACE	WB
WIND LOAD	W.L.
WITH	W/
WITHOUT	W/O
WATER PROOFING	W.P.
WORK POINT	W.P.
WOOD	WD.

MATERIALS LEGEND





DRAFTING SYMBOLS



PLAN/DETAIL DESIGNATION

PLAN NAME/DETAIL TITLE

SCALE:

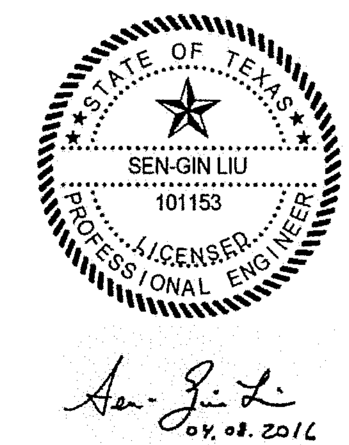
STRUCTURAL DRAWING TYPES

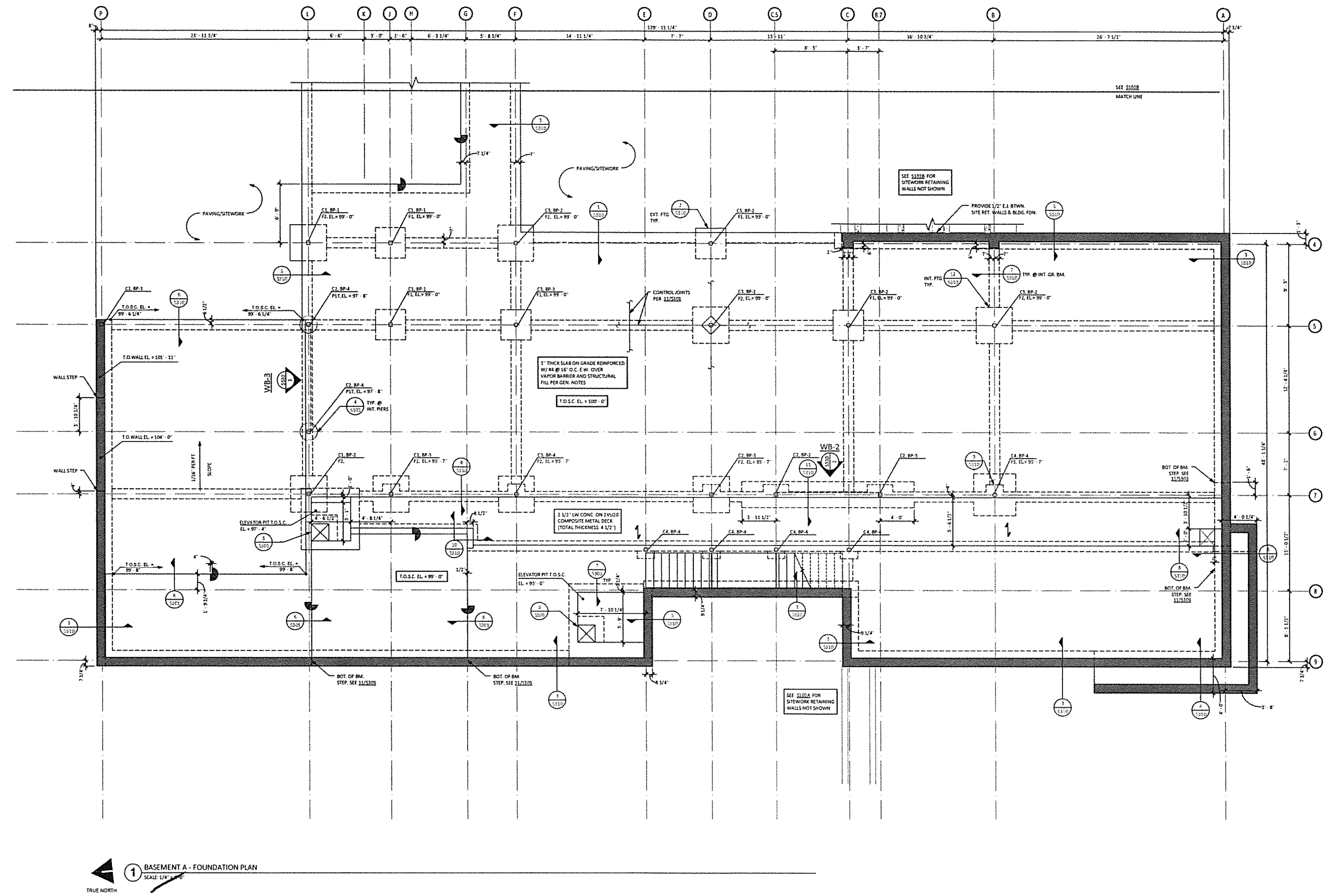
S0 . . . . GENERAL NOTES
S1 . . . . PLANS/FOUNDATION CONSTRUCTION
S3 . . . . CONCRETE CONSTRUCTION
S5 . . . . STEEL CONSTRUCTION

Sheffield Residence
3509 Westlake Drive
Austin, TX

GENERAL NOTES

S005





1/16" = 1'

FOOTING SCHEDULE		
Mark	Size	Reinforcement
F1	40" x 40" x 24"	(3) #5 EA. WAY
F2	50" x 50" x 24"	(4) #5 EA. WAY
F3	58" x 58" x 24"	(5) #6 EA. WAY

COLUMN SCHEDULE	
C1	HSS5X5X1/4
C2	HSS5X5X1/2
C3	5" X - STRONG PIPE
C4	5" XX - STRONG PIPE
C5	W8X31

FOUNDATION PLAN NOTES:

1. TOP OF STRUCTURAL CONCRETE ELEVATION IS DENOTED AS FOLLOWS UNLESS OTHERWISE NOTED:
   T.O.S.C. EL.=XXX'-XX" (AREA ELEVATION) — T.O.S.C. EL.= XXX'-XX" (SPOT ELEVATION)
2. REFERENCE (T.O.S.C. EL.) = 100'-0" EQUALS DATUM ELEVATION = 524'-0".
3. FOR FINISH FLOOR ELEVATIONS (F.F. EL.), REFER TO ARCHITECTURAL DRAWINGS. ELEVATIONS NOTED ON PLAN ARE FOR REFERENCE ONLY. REFER TO AND VERIFY ALL DIMENSIONS AND ELEVATIONS w/ ARCHITECTURAL DRAWINGS.
4. REFER TO THE ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS OF FLOOR RECESSES, DROPS AND SLOPES NOT DIMENSIONED ON PLAN.
5. REFER TO MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS FOR LOCATIONS AND DIMENSIONS OF PENETRATIONS NOT SHOWN OR DIMENSIONED ON PLAN.
6. REFER TO 15/S501 FOR BASEPLATE SICEDULE AND DETAILS
7. COLUMNS AND PIERS ARE NOTED ON PLAN AS FOLLOWS: COLUMN MARK, BASE PLATE MARK / PIER MARK, T.O. PIER EL.
8. COLUNS AND FOOTING ARE NOTED ON PLAN AS FOLLOWS: COLUMN MARK, BASE PLATE MARK / FOOTING MARK, T.O. FOOTING EL.
9. SEE 1/S302 FOR PIER DETAIL AND SCHEDULE

PLAN LEGEND:

- INDICATES BLDG CONCRETE COLUMN OR WALL
- INDICATES SITE CONCRETE WALL
- INDICATES STRUCTURAL CONCRETE SLAB STEP
- INDICATES STRUCTURAL CONCRETE SLOPE CHANGE
- DN → INDICATES STRUCTURAL CONCRETE SLOPE EXTENTS

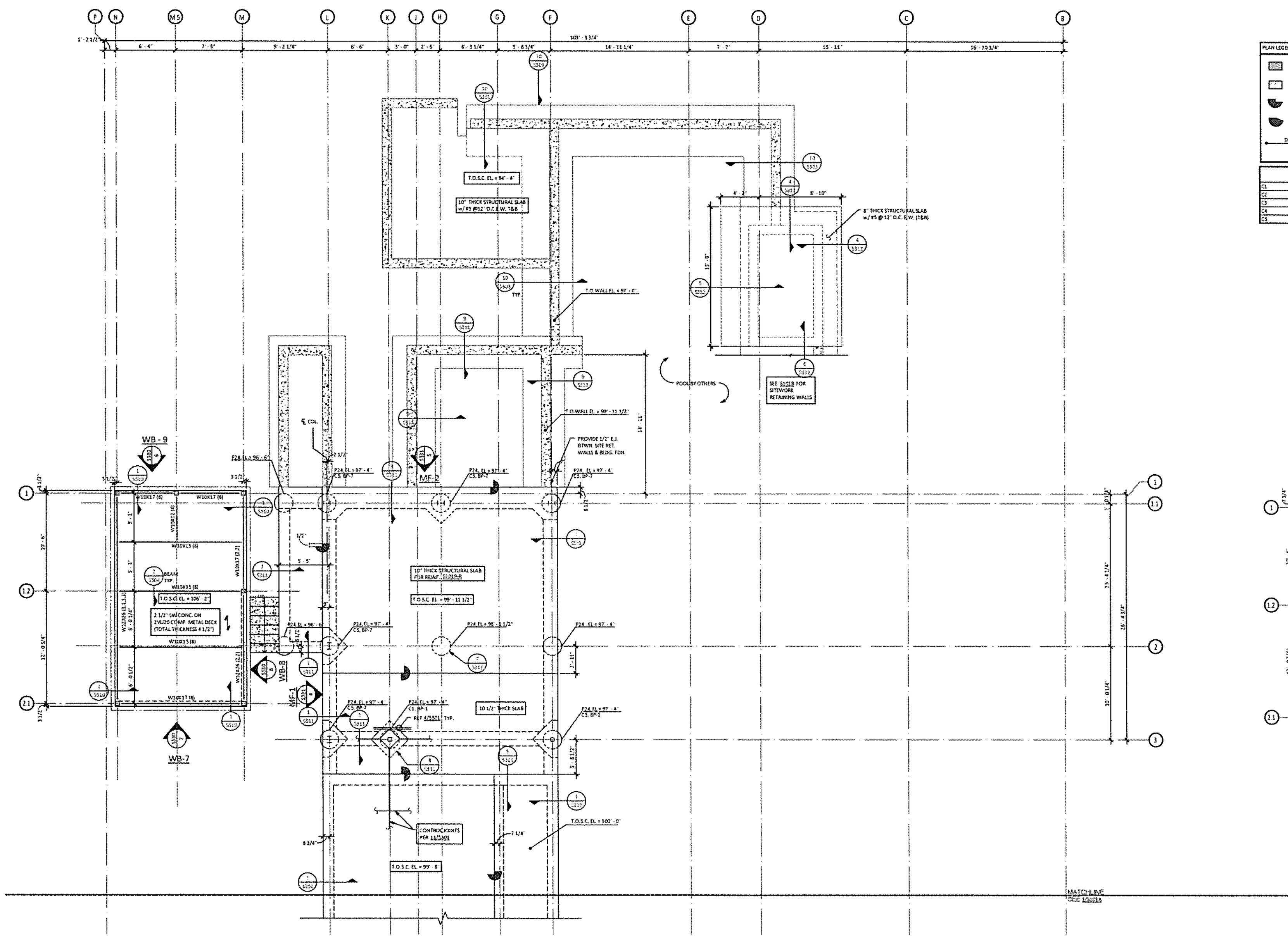
rwa rhotenberry wellen architects
1102 West Texas Avenue
Midland, Texas 79701
432.682.1252
432.682.1257 fax

aec Architectural Engineers Collaborative
FIRM REG#: F-1985
AEC JOB#: 13067

Sheffield Residence
3509 Westlake Drive
Austin, TX

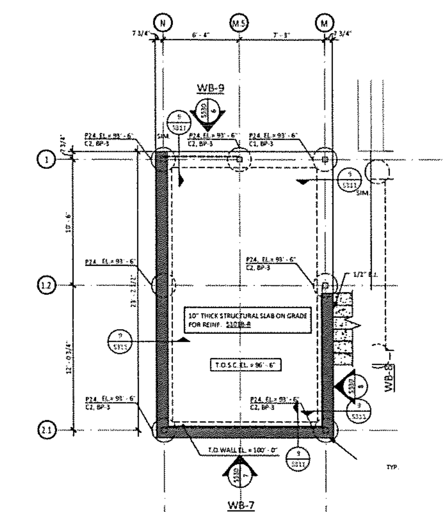
JOB NO. 13067
DRAWINGTITLE
BASEMENT A
REVISIONS
△
△
△
△
DATE 04/08/16
DRAWN BY N.K., J.C.
CHECKED BY R.L.
SHEET NO
S101A

STATE OF TEXAS
SEN-GIN LIU
101153
LICENSED PROFESSIONAL ENGINEER
Sen-Gin Liu 04.08.2016



1 BASEMENT LEVEL B

1/16" = 1'



2 FOUNDATION PLAN - MECHANICAL/POOL EQMT. BUILDING

SCALE: 1/4" = 1'-0"

PLAN LEGEND:

- INDICATES BLDG CONCRETE COLUMN OR WALL
- INDICATES SITE CONCRETE WALL
- INDICATES STRUCTURAL CONCRETE SLAB STEP
- INDICATES STRUCTURAL CONCRETE SLOPE CHANGE
- DN → INDICATES STRUCTURAL CONCRETE SLOPE EXTENTS

COLUMN SCHEDULE	
C1	HSS5X5X1/4
C2	HSS5X5X1/2
C3	5" X - STRONG PIPE
C4	5" XX - STRONG PIPE
C5	W8X21

FOUNDATION PLAN NOTES:

1. TOP OF STRUCTURAL CONCRETE ELEVATION IS DENOTED AS FOLLOWS UNLESS OTHERWISE NOTED:
   T.O.S.C. EL.=XXX'-XX" (AREA ELEVATION) — T.O.S.C. EL.= XXX'-XX" (SPOT ELEVATION)
2. REFERENCE (T.O.S.C. EL.) = 100'-0" EQUALS DATUM ELEVATION = 524'-0".
3. FOR FINISH FLOOR ELEVATIONS (F.F. EL.), REFER TO ARCHITECTURAL DRAWINGS. ELEVATIONS NOTED ON PLAN ARE FOR REFERENCE ONLY. REFER TO AND VERIFY ALL DIMENSIONS AND ELEVATIONS w/ ARCHITECTURAL DRAWINGS.
4. REFER TO THE ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS OF FLOOR RECESSES, DROPS AND SLOPES NOT DIMENSIONED ON PLAN.
5. REFER TO MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS FOR LOCATIONS AND DIMENSIONS OF PENETRATIONS NOT SHOWN OR DIMENSIONED ON PLAN.
6. REFER TO 15/S501 FOR BASEPLATE SHCEDULE AND DETAILS
7. COLUMNS AND PIERS ARE NOTED ON PLAN AS FOLLOWS:
   COLUMN MARK, BASE PLATE MARK / PIER MARK, T.O.PIER EL.
8. COLUNS AND FOOTING ARE NOTED ON PLAN AS FOLLOWS:
   COLUMN MARK, BASE PLATE MARK / FOOTING MARK, T.O. FOOTING EL.
9. SEE 1/S302 FOR PIER DETAIL AND SCHEDULE

STATE OF TEXAS
SEN-GIN LIU
101153
LICENSED PROFESSIONAL ENGINEER

Sen-Gin Liu
04.08.2016

rhotenberry wellen architects
1102 West Texas Avenue
Midland, Texas 79701
432.682.1252
432.682.1257 fax

aec Architectural Engineers Collaborative

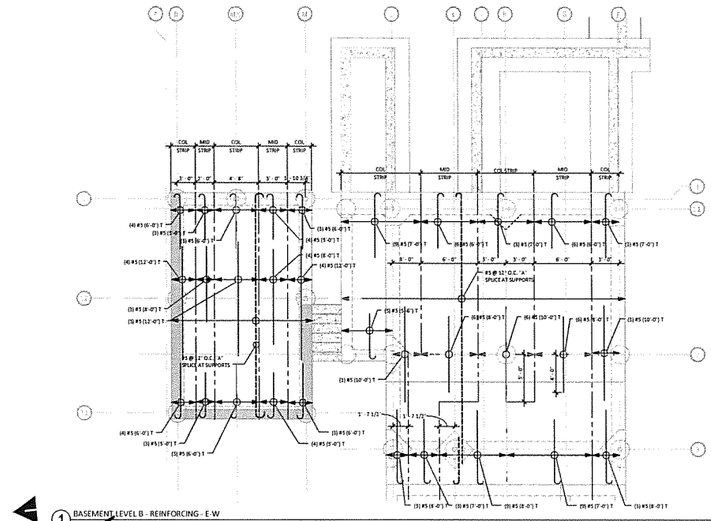
Sheffield Residence
3509 Westlake Drive
Austin, TX

JOB NO. 13067

DRAWING TITLE
BASEMENT B

REVISIONS

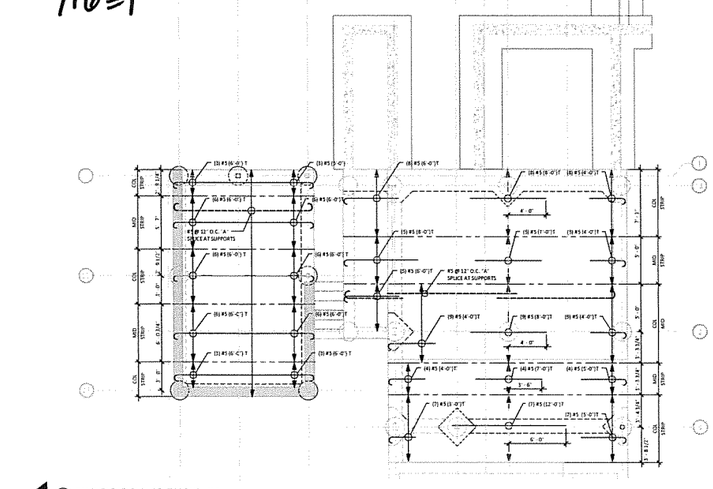
DATE 04/08/16
DRAWN BY N.K., J.C.
CHECKED BY R.L.
SHEET NO.
S101B



1 BASEMENT LEVEL B - REINFORCING - E-W
SCALE: 1/16" = 1'-0"

TRUE NORTH

1/16"=1'



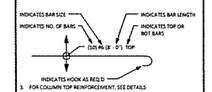
2 BASEMENT LEVEL B - REINFORCING - N-S
SCALE: 1/16" = 1'-0"

TRUE NORTH

1/16"=1'

REINFORCEMENT ON TWO-WAY SLAB PLAN NOTES:

1. SLAB REINFORCING IS NOTED ON PLAN AS FOLLOWS:



2. FOR COLUMN TOP REINFORCEMENT, SEE DETAILS
3. FOR TYPICAL TWO-WAY SLAB DETAILS SEE S3064
4. AT ALL SLAB EDGES, (INCLUDING OPENINGS) HOOK REBAR (TOP & BOTTOM). FOR HOOK DIMENSIONS, SEE S3301
5. PROVIDE TRIM REINFORCEMENT AROUND ALL OPENINGS AND RE-ENTRANT CORNERS PER S70066.
6. SPLICE BOTTOM BARS AT SUPPORTS WITH CLASS 'A' SPLICE.
7. LENGTHS INDICATED ON PLAN DO NOT INCLUDE STANDARD HOOK LENGTHS.
8. AT SLAB OPENINGS, PROVIDE ADDITIONAL REINFORCEMENT EQUAL TO THE AMOUNT INTERRUPTED ON ALL SIDES.
9. ALL MULTIPLE ADJACENT OPENINGS TO BE PER ⟨/⟩ .
10. SEE DETAILS & SECTIONS FOR ADD'L REINF. NOT SHOWN ON PLAN.

rwa
rholtenberry wellen architects
1102 West Texas Avenue
Midland, Texas 79701
432.682.1525
432.682.1527 fax

eec Architectural Engineering Consultants

STATE OF TEXAS
SEN-GIN LIU
101153
LICENSED
PROFESSIONAL ENGINEER

04.08.2016

Sheffield Residence
3509 Westlake Drive
Austin, TX

JOB NO. 13067
DRAWING TITLE
BASEMENT TWO-WAY SLAB REINF.
REVISIONS
△
△
△
△
DATE 04/08/16
DRAWN BY N.K., J.C.
CHECKED BY R.L.
SHEET NO.
S101B - R

COLUMN SCHEDULE
C1	HSS5X5X1/4
C2	HSS5X5X1/2
C3	5" X - STRONG PIPE
C4	5" XX - STRONG PIPE
C5	W8X31

FRAMING PLAN NOTES:

1. TOP OF STRUCTURAL CONCRETE ELEVATION IS DENOTED AS FOLLOWS UNLESS OTHERWISE NOTED:
   T.O.S.C. EL.+XXX'-XX" (AREA ELEVATION) — T.O.S.C. EL.+XXX'-XX" (SPOT ELEVATION)
2. REFERENCE (T.O.S.C. EL.) + 100'-0" EQUALS DATUM ELEVATION = 524'-0".
3. FOR FINISH FLOOR ELEVATIONS (F.F. EL.), REFER TO ARCHITECTURAL DRAWINGS. ELEVATIONS NOTED ON PLAN ARE FOR REFERENCE ONLY. REFER TO AND VERIFY ALL DIMENSIONS AND ELEVATIONS w/ ARCHITECTURAL DRAWINGS.
4. REFER TO THE ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS OF FLOOR RECESSES, DROPS AND SLOPES NOT DIMENSIONED ON PLAN.
5. REFER TO MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS FOR LOCATIONS AND DIMENSIONS OF PENETRATIONS NOT SHOWN OR DIMENSIONED ON PLAN.
6. COMPOSITE STEEL BEAMS ARE NOTED ON PLAN AS FOLLOWS:

PLAN LEGEND:

- INDICATES CONCRETE COLUMN OR WALL
- INDICATES STRUCTURAL CONCRETE SLAB STEP
- INDICATES STRUCTURAL CONCRETE SLOPE CHANGE
- DN — INDICATES STRUCTURAL CONCRETE SLOPE EXTENTS

rwa
rhotenberry weiten architects
1102 West Texas Avenue
Midland, Texas 79701
432 682 1252
432 682 1257 fax

aec Engineering Consultants

STATE OF TEXAS
SEN-GIN LIU
101153
LICENSED
PROFESSIONAL ENGINEER

Sen-Gin Liu
04.08.2016

Sheffield Residence
3509 Westlake Drive
Austin, TX

JOB NO. 13067
DRAWING TITLE
LEVEL 1A
REVISIONS
DATE 04/08/16
DRAWN BY N.K. J.C.
CHECKED BY R.L.
SHEET NO. S102A

1 LEVEL 1A - FRAMING PLAN E-W.
SCALE: 1/16" = 1'-0"

TRUE NORTH

1/16" = 1'

2 LEVEL 1A - FRAMING PLAN N-S.
SCALE: 1/4" = 1'-0"

TRUE NORTH

REINFORCEMENT IN TWO-WAY SLAB PLAN NOTES:

1. SLAB REINFORCING IS NOTED ON PLAN AS FOLLOWS:

3. FOR COLUMN TOP REINFORCEMENT, SEE DETAILS.
4. FOR TYPICAL TWO-WAY SLAB DETAILS SEE S5046.
5. AT ALL SLAB EDGES, (INCLUDING OPENINGS) HOOK REBAR (TOP & BOTTOM). FOR HOOK DIMENSIONS, SEE S5301.
6. PROVIDE TRIM REINFORCEMENT AROUND ALL OPENINGS AND RE-ENTRANT CORNERS PER S5046.
7. SPLICE BOTTOM BARS AT SUPPORTS WITH CLASS 'A' SPLICE.
8. LENGTHS INDICATED ON PLAN DO NOT INCLUDE STANDARD HOOK LENGTHS.
9. AT SLAB OPENINGS, PROVIDE ADDITIONAL REINFORCEMENT EQUAL TO THE AMOUNT INTERRUPTED ON ALL SIDES.
10. ALL MULTIPLE ADJACENT OPENINGS TO BE PER ⚠△ .
11. SEE DETAILS & SECTIONS FOR ADD'L REINF. NOT SHOWN ON PLAN.

rwa
rholenberry wellen architects
1102 West Texas Avenue
Midland, Texas 79701
432.682.1252
432.682.1257 fax

aec engineers
structural consultants
P.O. Box 3111
Midland, Texas 79702
(432) 682-3111
www.aecmidland.com
TBPE REG. # F-2280
TBPLS REG. # 10081-00

STATE OF TEXAS
SEN-GIN LIU
101153
LICENSED
PROFESSIONAL ENGINEER

Sen-Gin Li
04.08.2016

Sheffield Residence
3509 Westlake Drive
Austin, TX

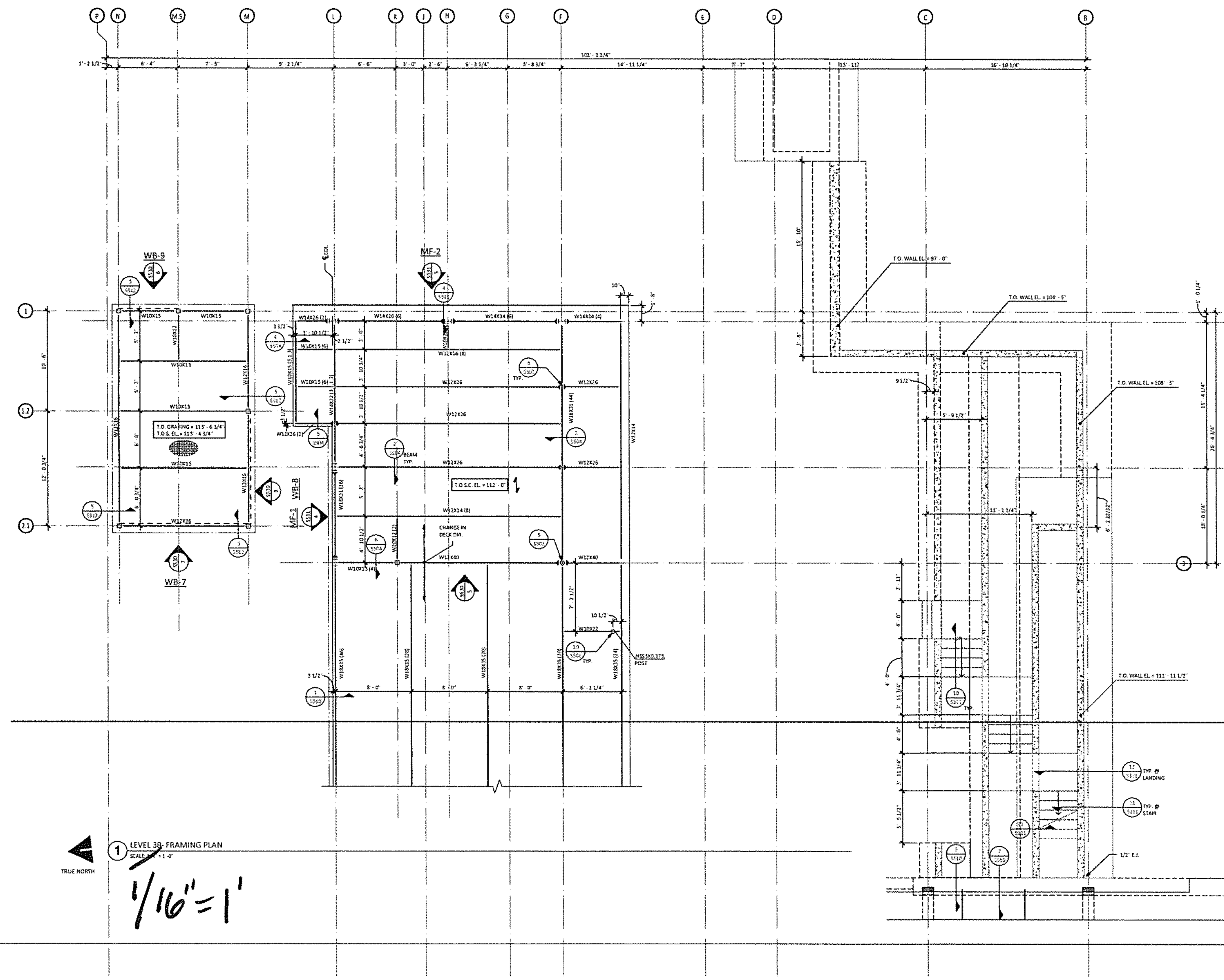
JOB NO. 13067
DRAWING TITLE
LEVEL 1A TWO-WAY SLAB REINF.
REVISIONS
△
△
△
△
DATE 04/08/16
DRAWN BY N.K., J.C.
CHECKED BY R.L.
SHEET NO.
S102A - R

FRAMING PLAN NOTES:

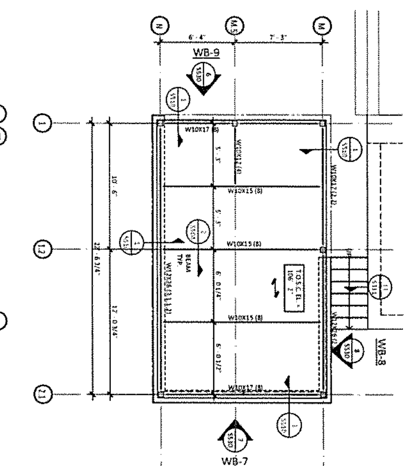
1. TOP OF STRUCTURAL CONCRETE ELEVATION IS DENOTED AS FOLLOWS UNLESS OTHERWISE NOTED:
   T.O.S.C. EL.=XXX'-XX" (AREA ELEVATION) — T.O.S.C. EL.=XXX'-XX" (SPOT ELEVATION)
2. REFERENCE (T.O.S.C. EL.) = 100'-0" EQUALS DATUM ELEVATION = 524'-0".
3. FOR FINISH FLOOR ELEVATIONS (F.F. EL.), REFER TO ARCHITECTURAL DRAWINGS. ELEVATIONS NOTED ON PLAN ARE FOR REFERENCE ONLY. REFER TO AND VERIFY ALL DIMENSIONS AND ELEVATIONS w/ ARCHITECTURAL DRAWINGS.
4. REFER TO THE ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS OF FLOOR RECESSES, DROPS AND SLOPES NOT DIMENSIONED ON PLAN.
5. REFER TO MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS FOR LOCATIONS AND DIMENSIONS OF PENETRATIONS NOT SHOWN OR DIMENSIONED ON PLAN.
6. COMPOSITE STEEL BEAMS ARE NOTED ON PLAN AS FOLLOWS:
   5K W14x22, (20) c=1" 5K — BEAM MARK; BEAM END REACTION (SERVICE OR FACTORED); CAMBER AT MID. LENGTH; NUMBER OF HEADED STUDS

PLAN LEGEND:

- INDICATES CONCRETE COLUMN OR WALL
- INDICATES STRUCTURAL CONCRETE SLAB STEP
- INDICATES STRUCTURAL CONCRETE SLOPE CHANGE
- DN → INDICATES STRUCTURAL CONCRETE SLOPE EXTENTS



1 LEVEL 3B FRAMING PLAN
SCALE: 1/8" = 1'-0"
1/16" = 1'



1.5 LEVEL 1.5 - MECHANICAL FLOOR
SCALE: 1/4" = 1'-0"

STATE OF TEXAS
SEN-GIN LIU
101153
LICENSED PROFESSIONAL ENGINEER

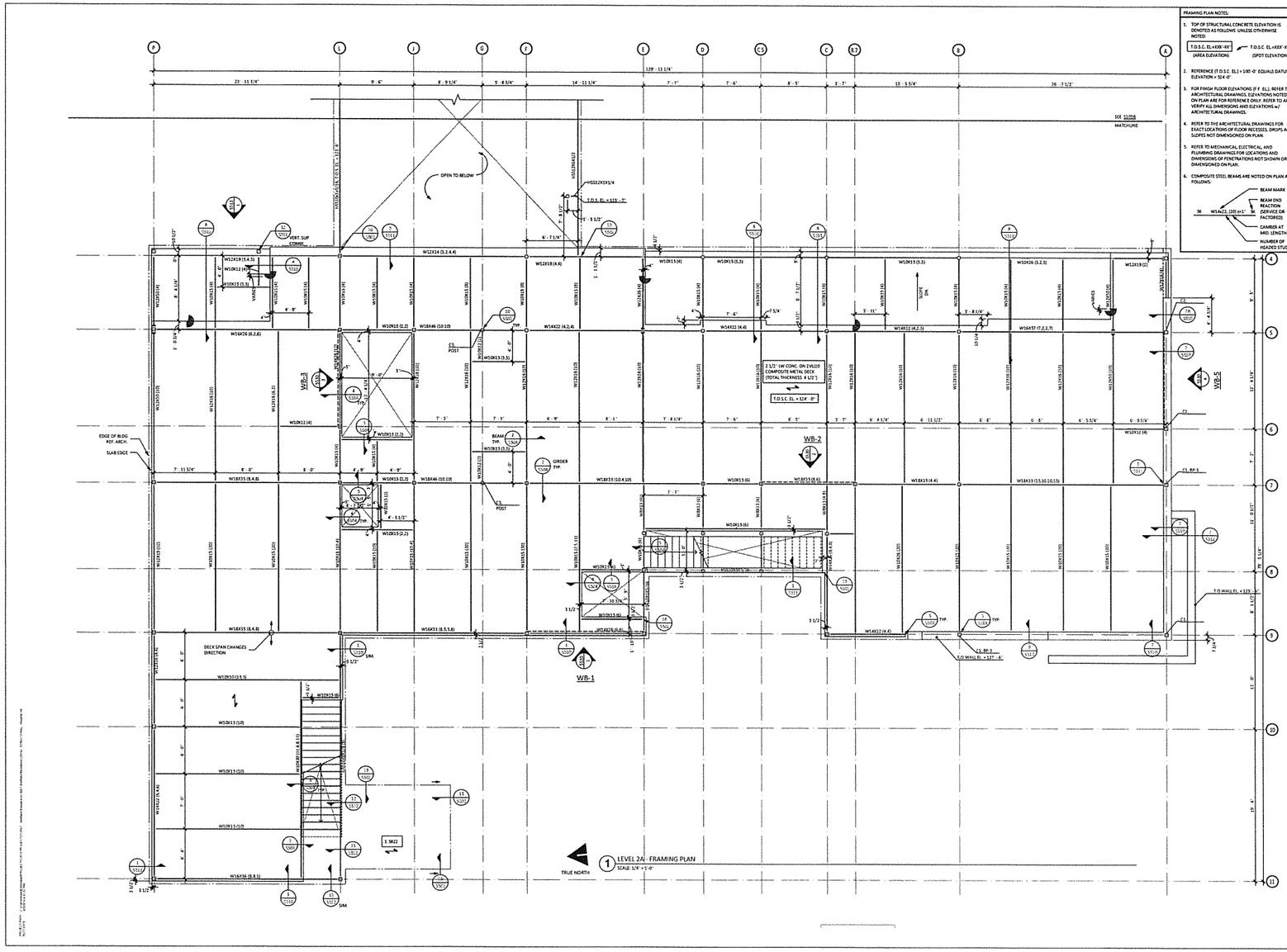
Sen-Gin Liu
04.08.2016

rwa rhotenberry wellen architects
1102 West Texas Avenue
Midland, Texas 79701
432.682.1252
432.682.1257 fax

aec Architectural Engineers Collaborative
FIRM REG#: F-2585
AEC JOB#: 13067

Sheffield Residence
3509 Westlake Drive
Austin, TX

JOB NO.	13067
DRAWING TITLE	LEVEL 1B
REVISIONS	△ △ △ △
DATE	04/08/16
DRAWN BY	N.K., J.C.
CHECKED BY	R.L.
SHEET NO.	S102B



FRAMING PLAN NOTES:

1. TOP OF STRUCTURAL CONCRETE ELEVATION IS DENOTED AS FOLLOWS UNLESS OTHERWISE NOTED:
   T.O.S.C. EL.+XXX'-XX" (AREA ELEVATION) — T.O.S.C. EL.+XXX'-XX" (SPOT ELEVATION)
2. REFERENCE (T.O.S.C. EL.) + 100'-0" EQUALS DATUM ELEVATION + 324'-4".
3. FOR FINISH FLOOR ELEVATIONS (F.F. ELL), REFER TO ARCHITECTURAL DRAWINGS. ELEVATIONS NOTED ON PLAN ARE FOR REFERENCE ONLY. REFER TO AND VERIFY ALL DIMENSIONS AND ELEVATIONS w/ ARCHITECTURAL DRAWINGS.
4. REFER TO THE ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS OF FLOOR RECESSES, DROPS AND SLOPES NOT DIMENSIONED ON PLAN.
5. REFER TO MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS FOR LOCATIONS AND DIMENSIONS OF PENETRATIONS NOT SHOWN OR DIMENSIONED ON PLAN.
6. COMPOSITE STEEL BEAMS ARE NOTED ON PLAN AS FOLLOWS:

PLAN LEGEND:

- INDICATES CONCRETE COLUMN OR WALL
- INDICATES STRUCTURAL CONCRETE SLAB STEP
- INDICATES STRUCTURAL CONCRETE SLOPE CHANGE
- 2% — INDICATES STRUCTURAL CONCRETE SLOPE EXTENTS

COLUMN SCHEDULE	
C1	HSS5X5X1/4
C2	HSS5X5X1/2
C3	3" X - STRONG PIPE
C4	5" XX - STRONG PIPE
C5	W8X31

1102 West Texas Avenue
Midland, Texas 79701
432 682 1252
432 682 1257 fax

rwa
rhotenberry weiler architects

aec Architectural Engineers

STATE OF TEXAS
SEN-GIN LIU
101153
LICENSED
PROFESSIONAL ENGINEER

Sen-Gin Liu 04.08.2016

Sheffield Residence
3509 Westlake Drive
Austin, TX

JOB NO. 13067
DRAWING TITLE
LEVEL 2A
REVISIONS
△
△
△
△
△
DATE 04/08/16
DRAWN BY N.K. J.C
CHECKED BY R.L
SHEET NO.
S103A

1 LEVEL 2B - FRAMING PLAN
SCALE: 1/16" = 1'-0"

TRUE NORTH

1/16"=1'

1102 West Texas Avenue
Midland, Texas 79701
432.682.1257 tel.
432.682.1257 fax.

rwa
rhotenberry
weiler
architects

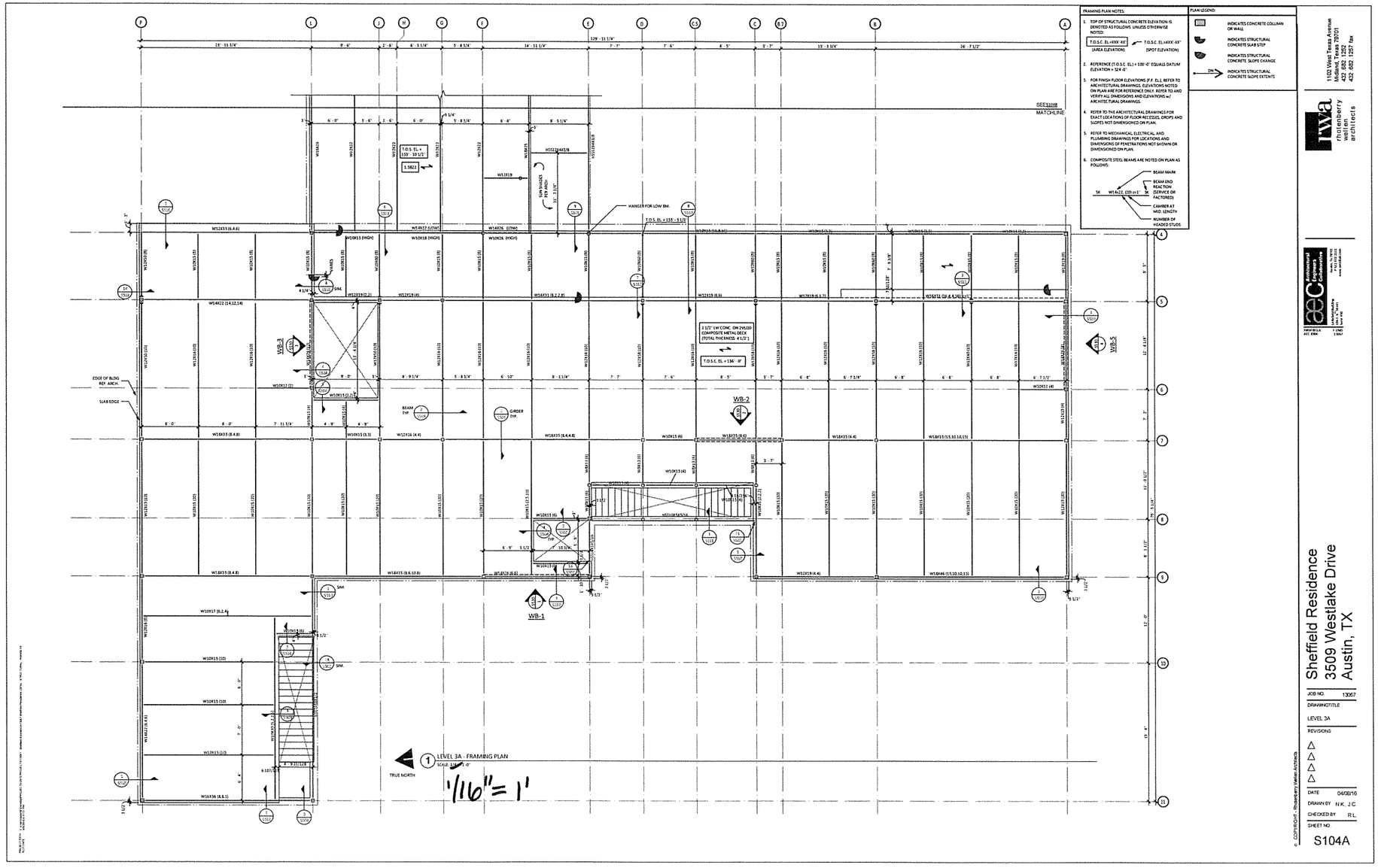
aec Commercial Engineers Architecture

STATE OF TEXAS
SEN-GIN LIU
101153
LICENSED
PROFESSIONAL ENGINEER

Sen-Gin Liu
04.08.2016

Sheffield Residence
3509 Westlake Drive
Austin, TX

JOB NO. 13067
DRAWING TITLE
LEVEL 2B
REVISIONS
△
△
△
△
DATE 04/08/16
DRAWN BY N.K. J.C.
CHECKED BY R.L.
SHEET NO.
S103B



1102 West Texas Avenue
Midland, Texas 79701
432 682 1252
432 682 1257 fax

rwa
rhotenberry weiler architects

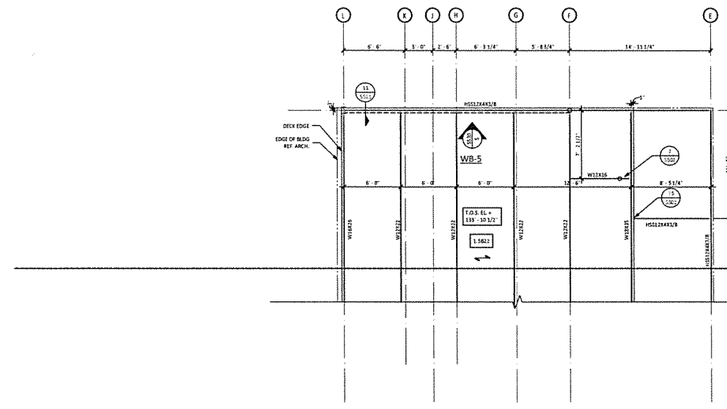
aec Architectural Engineers Collaborative

STATE OF TEXAS
SEN-GIN LIU
101153
LICENSED
PROFESSIONAL ENGINEER

04.08.2016

Sheffield Residence
3509 Westlake Drive
Austin, TX

JOB NO. 13067
DRAWING TITLE
LEVEL 3A
REVISIONS
△
△
△
△
DATE 04/08/16
DRAWN BY N.K., J.C.
CHECKED BY R.L.
SHEET NO.
S104A



1 LEVEL 3B - FRAMING PLAN
SCALE: 1/16" = 1'-0"

TRUE NORTH

1/16" = 1'

FRAMING PLAN NOTES:

1. TOP OF STRUCTURAL CONCRETE ELEVATION IS DENOTED AS FOLLOWS UNLESS OTHERWISE NOTED:
   T.O.S.C. EL.=XXX'-XX" (AREA ELEVATION) — T.O.S.C. EL.=XXX'-XX" (SPOT ELEVATION)
2. REFERENCE (T.O.S.C. EL.) + 100'-0" EQUALS DATUM ELEVATION + 324'-0".
3. FOR FINISH FLOOR ELEVATIONS (F.F. EL.), REFER TO ARCHITECTURAL DRAWINGS. ELEVATIONS NOTED ON PLAN ARE FOR REFERENCE ONLY. REFER TO AND VERIFY ALL DIMENSIONS AND ELEVATIONS w/ ARCHITECTURAL DRAWINGS.
4. REFER TO THE ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS OF FLOOR RECESSES, DROPS AND SLOPES NOT DIMENSIONED ON PLAN.
5. REFER TO MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS FOR LOCATIONS AND DIMENSIONS OF PENETRATIONS NOT SHOWN OR DIMENSIONED ON PLAN.
6. COMPOSITE STEEL BEAMS ARE NOTED ON PLAN AS FOLLOWS:
   BEAM MARK
   BEAM END REACTION (SERVICE OR FACTORED)
   SE W16X31 (20) or 5
   CAMBER AT MID. LENGTH
   NUMBER OF HEADED STUDS

PLAN LEGEND:

- INDICATES CONCRETE COLUMN OR WALL
- INDICATES STRUCTURAL CONCRETE SLAB STEP
- INDICATES STRUCTURAL CONCRETE SLOPE CHANGE
- DN — INDICATES STRUCTURAL CONCRETE SLOPE EXTENTS

rtwa
rhotenberry weiler architects
1102 West Texas Avenue
Midland, Texas 79701
432 682 1257
432 682 1257 fax

aec Architectural Engineering Consultants

STATE OF TEXAS
SEN-GIN LIU
101153
LICENSED
PROFESSIONAL ENGINEER
04.08.2016

Sheffield Residence
3509 Westlake Drive
Austin, TX

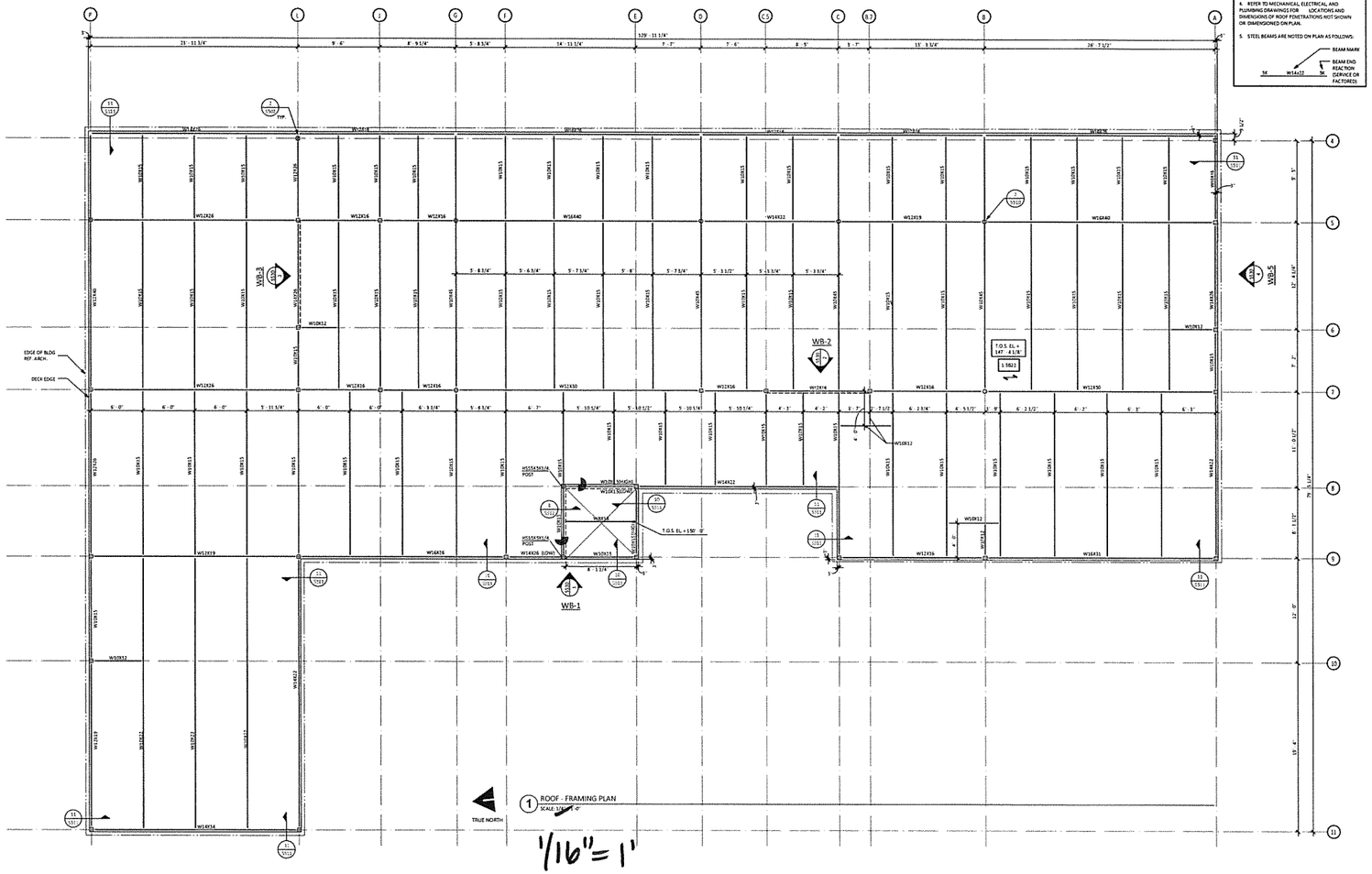
JOB NO. 13057
DRAWING TITLE
LEVEL 3B
REVISIONS
DATE 04/08/16
DRAWN BY N.K., J.C.
CHECKED BY R.L.
SHEET NO.
S104B

ROOF PLAN NOTES:

1. TOP OF STRUCTURAL STEEL ELEVATION (BOTTOM OF DECK) IS DENOTED AS FOLLOWS UNLESS OTHERWISE NOTED:
   (AREA ELEVATION) T.O.S. EL.+XXX'-XX" (SPOT ELEVATION) T.O.S. EL.+XXX'-XX"
2. FOR FINISH FLOOR ELEVATIONS (F.F. EL.), REFER TO ARCHITECTURAL DRAWINGS. ELEVATIONS NOTED ON PLAN ARE FOR REFERENCE ONLY. REFER TO AND VERIFY ALL DIMENSIONS AND ELEVATIONS w/ ARCHITECTURAL DRAWINGS.
3. REFER TO THE ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS OF ROOF SLOPES NOT DIMENSIONED ON PLAN.
4. REFER TO MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS FOR LOCATIONS AND DIMENSIONS OF ROOF PENETRATIONS NOT SHOWN OR DIMENSIONED ON PLAN.
5. STEEL BEAMS ARE NOTED ON PLAN AS FOLLOWS:
   BEAM MARK — W14x22 — BEAM END REACTION (SERVICE OR FACTORED) 5K / 9K

PLAN LEGEND:

- INDICATES CONCRETE COLUMN OR WALL
- INDICATES STRUCTURAL CONCRETE SLAB STEP
- INDICATES STRUCTURAL CONCRETE SLOPE CHANGE
- DN — INDICATES STRUCTURAL CONCRETE SLOPE EXTENTS



1 ROOF - FRAMING PLAN
SCALE: 1/16" = 1'-0"

1/16"=1'

twa rhotenberry weller architects
1102 West Texas Avenue
Midland, Texas 79701
432.682.1202
432.682.1257 fax

aec Architectural Engineering Consultants

STATE OF TEXAS
SEN-GIN LIU
101153
LICENSED
PROFESSIONAL ENGINEER
04.08.2016

Sheffield Residence
3509 Westlake Drive
Austin, TX

JOB NO 13067
DRAWING TITLE ROOF
REVISIONS
DATE 04/08/16
DRAWN BY N.K., J.C.
CHECKED BY R.L.
SHEET NO S105

1 STANDARD DOWEL SCHEDULE
NO SCALE

DOWEL SCHEDULE			
MARK	SIZE	A	B
DWL A	#4	8"	1'-0"
DWL B	#4	2'-6"	1'-0"
DWL C	#4	-	4'-0"
DWL D	#4	8"	6'-0"
DWL E	#4	-	6'-0"

NOTES:

1. SCHEDULED DOWELS ARE MARKED "DWL" ON THE SECTIONS AND DETAILS.
2. DOWEL SPACING TO BE THE SAME AS SLAB OR WALL REINFORCEMENT, UNLESS OTHERWISE NOTED ON DETAILS.

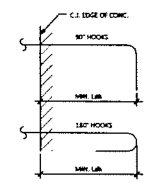
2 LAP SPLICE SCHEDULE
NO SCALE

REINFORCEMENT SPLICE LENGTH SCHEDULE	f'c=4000 psi CONCRETE	
BAR SIZE \ CLASS	"A"	"B"
#3	1'-3"	1'-7"
#4	1'-7"	2'-1"
#5	2'-0"	2'-7"
#6	2'-5"	3'-1"
#7	3'-6"	4'-6"
#8	4'-0"	5'-2"
#9	4'-6"	5'-10"
#10	5'-1"	6'-7"
#11	5'-7"	7'-3"

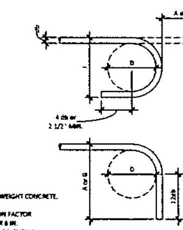
NOTES:

1. WHERE SPLICE TYPE IS NOT INDICATED, USE CLASS "B" SPLICE.
2. LAP LENGTHS LISTED ABOVE APPLY UNDER THE FOLLOWING CONDITIONS.
   A. BEAM & COLUMN BARS ARE SPACED AT LEAST 1 BAR DIAMETERS O.C. WITH CLEAR COVER NOT LESS THAN 1 BAR DIAMETER.
   B. WALL & SLAB BARS ARE SPACED AT LEAST 2 BAR DIA. O.C.
   C. FOR UNCOATED AND ZINC-COATED (GALVANIZED) REINFORCEMENT.
   D. FOR REINFORCEMENT THAT CONFORMS DEFORMED NEW BILLET STEEL BARS IN ACCORDANCE TO ASTM A615 GR. 60.
3. WHERE CLEAR COVER OR CLEAR SPACING FOR MASONRY REINF. IS LESS THAN 5 BAR DIAMETERS, INCREASE SPLICE LENGTHS SHOWN BY MULTIPLYING LENGTHS BY MAX. RATIO OF 5 BAR DIAMETERS TO CLEAR COVER OR SPACING.
4. FOR HORIZ. TOP BARS w/ 12" OF CONCRETE CAST BELOW, MULTIPLY TABULATIONS BY 1.3.
5. WHERE A LARGER BAR LAPS A SMALLER BAR, THE SMALLER SCHEDULED LAP LENGTH APPLIES U.O.N.
6. REFER TO "CONCRETE REINFORCING" SECTION OF THE GENERAL NOTES FOR FURTHER INFORMATION.

3 STANDARD HOOK SCHEDULE
NO SCALE



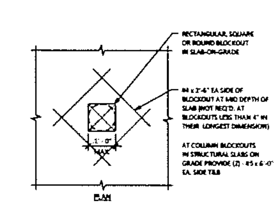
HOOK DEVELOPMENT LENGTH SCHEDULE, Ldh	
BAR SIZE	4000 psi
#3	8"
#4	10"
#5	1'-0"
#6	1'-3"
#7	1'-5"
#8	1'-7"
#9	1'-10"
#10	2'-1"
#11	2'-3"



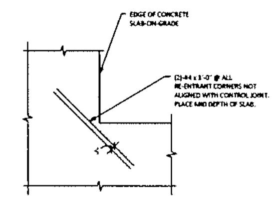
STANDARD HOOK SCHEDULE				
BAR SIZE	D	180° HOOK		90° HOOK
		A or G	J	A or G
#3	2 1/4"	5"	3"	6"
#4	3"	6"	4"	8"
#5	3 3/4"	7"	5"	10"
#6	4 1/2"	8"	6"	12"
#7	5 1/4"	10"	7"	1'-2"
#8	6"	11"	8"	1'-4"
#9	9 1/2"	1'-3"	11 3/4"	1'-7"
#10	10 3/4"	1'-5"	1'-1 1/4"	1'-10"
#11	12"	1'-7"	1'-2 3/4"	2'-0"

NOTES:

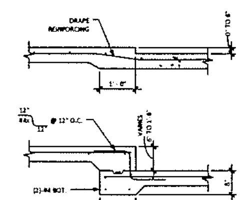
1. TABULATED VALUES ARE BASED ON GRADE 60 REINFORCING BARS AND NORMAL WEIGHT CONCRETE.
2. FOR TABULATED BARS SIZES ONLY:
   A. IF CONCRETE COVER PER ACI 318-11, SECTION 12.5.3(a), THEN A MODIFICATION FACTOR OF 0.7 MAY BE APPLIED BUT THE LENGTH MUST NOT BE LESS THAN 8 x db NOR 6 IN.
   B. IF HOOK IS ENCLOSED IN TIES OR STIRRUPS PER ACI 318-08, SECTION 12.5.3(b),(c), THEN A MODIFICATION FACTOR OF 0.8 MAY BE APPLIES BUT THE LENGTH MUST NOT BE LESS THAN 8 x db NOR 6 IN.



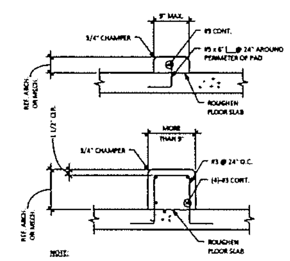
4 TYPICAL DETAIL - ADDITIONAL REINFORCING AT BLOCKOUT IN SLAB-ON-GRADE
NO SCALE



5 TYPICAL DETAIL - SLAB-ON-GRADE RE-ENTRANT CORNER REINF.
NO SCALE



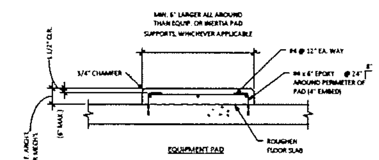
6 TYPICAL DETAIL DROP IN SLAB-ON-GRADE
NO SCALE



NOTE:

PROVIDE CONSTRUCTION JOINTS @ 20'-0" O.C. MAX.

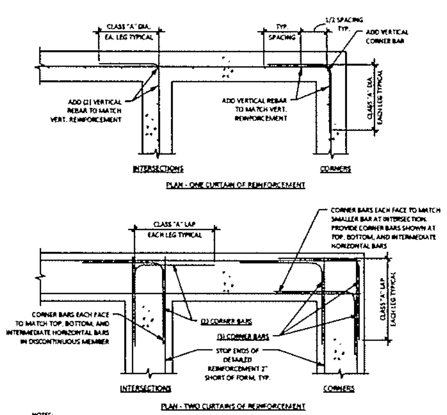
7 TYPICAL DETAIL SLAB-ON-GRADE OR STRUCTURAL SLAB MECHANICAL CURB
NO SCALE



NOTES:

1. PADS PER DETAIL TO BE PROVIDED UNDER EQUIPMENT SUPPORTED ON SLAB-ON-GRADE OR ELEVATED SLABS.
2. COORDINATE MECHANICAL PAD SIZE, LOCATION AND EMBEDDED ITEMS WITH MEP DRAWINGS AND EQUIPMENT MANUFACTURER.

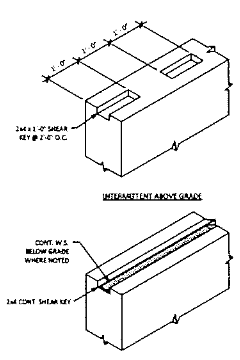
8 TYPICAL DETAIL MECHANICAL PAD
NO SCALE



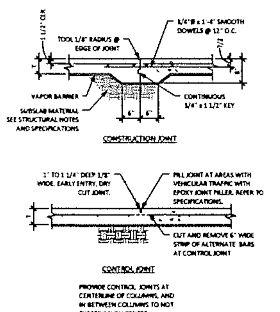
NOTES:

1. WHERE 90 DEGREE HOOKS ARE SCHEDULED OR DETAILED FOR BARS, CORNER BARS MAY BE OMITTED FOR THAT LAYER.
2. MATCH SIZE, LOCATION AND NUMBER OF HORIZONTAL BEAM AND WALL BARS, EXCEPT THAT WHERE THERE ARE MORE THAN 1 TOP OR BOTTOM BARS, ONLY THE INSIDE AND OUTSIDE BARS MUST BE MATCHED.

9 TYPICAL DETAIL WALL OR GRADE BEAM REINFORCING
NO SCALE



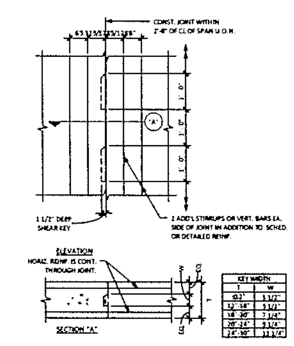
10 TYPICAL DETAIL GRADE BEAM SHEAR KEY AT HORIZONTAL JOINT
NO SCALE



NOTES:

1. SEE PLAN FOR THICKNESS OF SLAB (T) AND REINFORCING.
2. PROVIDE A CONSTRUCTION OR A CONTROL JOINT ON THE CENTERLINES OF COLUMNS, U.O.N.
3. SLABS SHALL CUT IN A JOINT PATTERN w/ WIDTHS NOT EXCEEDING THOSE SHOWN, U.O.N. CONTRACTOR SHALL SUBMIT JOINT PATTERNS FOR REVIEW.
4. IF METAL FORMS ARE USED, REMOVE THEM BEFORE POURING ADJACENT SLAB.
5. FOR SLABS WITH THICKNESS (T) GREATER THAN 6", THICKENED EDGES ARE NOT REQUIRED AT JOINTS.
6. INFILL STRIPS CAN BE PLACED AFTER INITIAL SLAB STRIPS HAVE CURED FOR 3 DAYS.
7. DO NOT CUT CONTOL JOINTS IN STRUCTURAL SLABS ON GRADE.

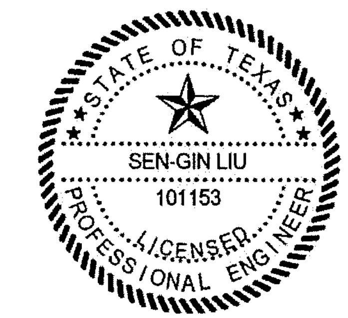
11 TYPICAL DETAIL SLAB-ON-GRADE
NO SCALE

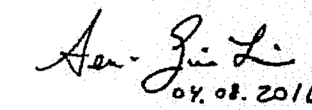


NOTES:

1. THIS DETAIL APPLIES TO GRADE BEAMS DEEPER THAN 4'-0" AND ALL WALLS.
2. HORIZ. REINF. (NOT SHOWN) IS CONT. THRU CONSTRUCTION JOINT.

12 TYPICAL DETAIL DEEP GRADE BEAM AND WALL VERTICAL CONSTRUCTION JOINT
NO SCALE



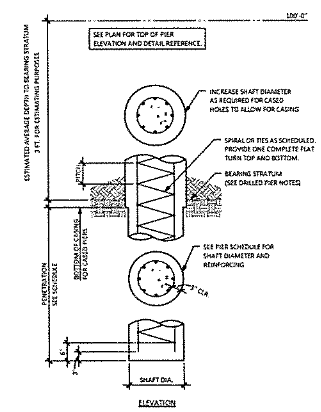


rwa
rhotenberry wellen architects
1102 West Texas Avenue
Midland, Texas 79701
432.682.1252
432.682.1257 fax

aeC Architectural Engineers Collaborative

Sheffield Residence
3509 Westlake Drive
Austin, TX

JOB NO. 13067
DRAWING TITLE
CONCRETE TYPICAL DETAILS
REVISIONS
△
△
△
△
DATE 04/08/16
DRAWN BY N.K., J.C.
CHECKED BY R.L.
SHEET NO.
S301

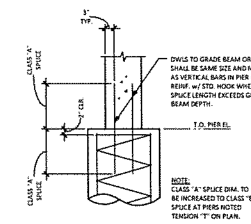


PIER SCHEDULE				
MARK	SHAFT DIAMETER	VERTICAL REINFORCING	SPIRALS	Penetration
P17,	24"	(8) - #7's	#3 @ 12" O.C.	15' - 0"
P24	24"	(8) - #7's	#3 @ 12" O.C.	14' - 0"

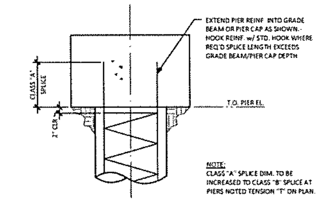
NOTE:

1. VERT. REINF. SHALL BE CLASS "A" SPLICED, TYP.
2. VERT. REINF. FOR TENSION "T" PIERS SHALL BE CLASS "B" SPLICED.
3. ROUND TIES THUS: ◯ MAY BE USED IN LIEU OF SPIRALS. TIE LAP SHALL BE 18" MINIMUM.

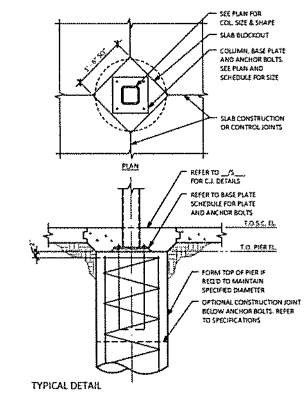
1 PIER DETAIL AND SCHEDULE
NO SCALE



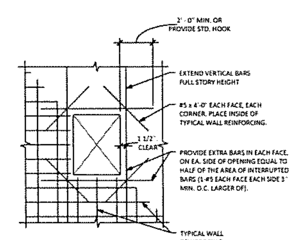
TYPICAL DETAIL
2 NARROW BEAM OR WALL BEARING ON WIDER PIER
NO SCALE



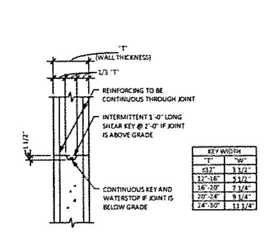
TYPICAL DETAIL
3 WIDE GRADE BEAM OR PIER CAP BEARING ON NARROW PIER
NO SCALE



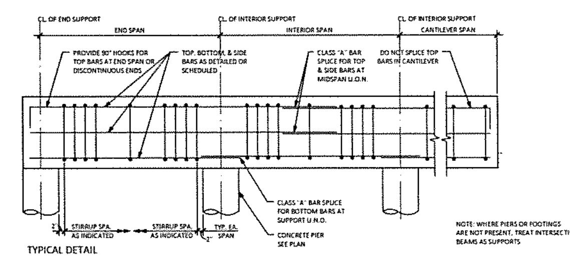
TYPICAL DETAIL
4 TOP OF PIER
NO SCALE



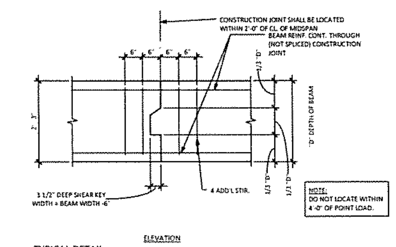
TYPICAL DETAIL
5 REINF. AT CONCRETE WALL OPENING
NO SCALE



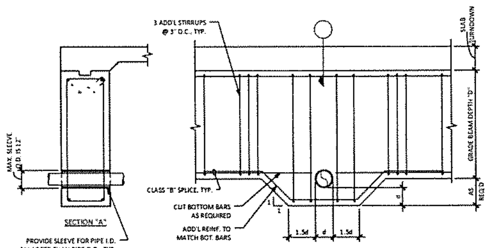
TYPICAL DETAIL
6 HORIZONTAL CONSTRUCTION JOINT IN CONCRETE WALL
NO SCALE



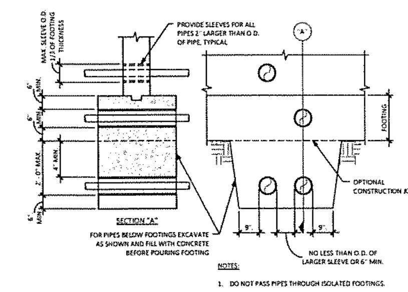
TYPICAL DETAIL
7 GRADE BEAM REINFORCING
NO SCALE



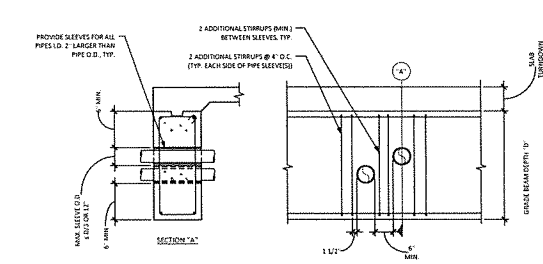
TYPICAL DETAIL
8 BEAM CONSTRUCTION JOINT
NO SCALE



TYPICAL DETAIL
HORIZONTAL PENETRATIONS
9 THROUGH BOTTOM OF GRADE BEAM
NO SCALE



TYPICAL DETAIL
HORIZONTAL PIPE PENETRATIONS
10 THROUGH AND/OR BELOW FOOTINGS
NO SCALE

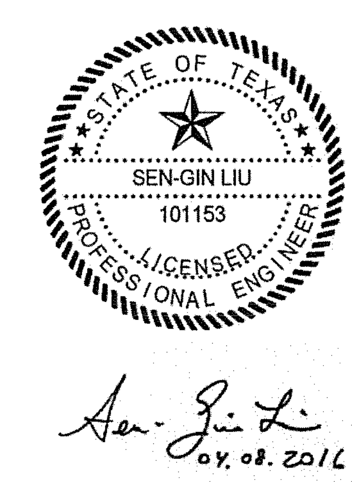


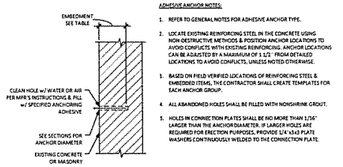
TYPICAL DETAIL
HORIZONTAL PIPE PENETRATIONS
11 THROUGH GRADE BEAM
NO SCALE

rhotenberry wellen architects
1102 West Texas Avenue
Midland, Texas 79701
432.682.1252
432.682.1257 fax

Sheffield Residence
3509 Westlake Drive
Austin, TX

JOB NO. 13067
DRAWING TITLE
CONCRETE TYPICAL DETAILS
REVISIONS
△
△
△
△
DATE 04/06/16
DRAWN BY N.K., J.C.
CHECKED BY R.L.
SHEET NO.
S302



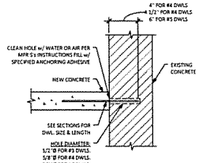


ADHESIVE ANCHOR NOTES:

1. REFER TO GENERAL NOTES FOR ADHESIVE ANCHOR TYPE.
2. LOCATE EXISTING REINFORCING STEEL IN THE CONCRETE USING NON-DESTRUCTIVE METHODS & POSITION ANCHOR LOCATIONS TO AVOID CONFLICTS WITH EXISTING REINFORCING. ANCHOR LOCATIONS CAN BE ADJUSTED BY A MAXIMUM OF 1 1/2" FROM DETAILED LOCATIONS TO AVOID CONFLICTS, UNLESS NOTED OTHERWISE.
3. BASED ON FIELD VERIFIED LOCATIONS OF REINFORCING STEEL & EMBEDDED ITEMS, THE CONTRACTOR SHALL CREATE TEMPLATES FOR EACH ANCHOR GROUP.
4. ALL ABANDONED HOLES SHALL BE FILLED WITH NONSHRINK GROUT.
5. HOLES IN CONNECTION PLATES SHALL BE NO MORE THAN 1/16" LARGER THAN THE ANCHOR DIAMETER. IF LARGER HOLES ARE REQUIRED FOR ERECTION PURPOSES, PROVIDE 1/4"x3x3 PLATE WASHERS CONTINUOUSLY WELDED TO THE CONNECTION PLATE.

ANCHOR INSTALLATION INFORMATION			
ANCHOR DIAMETER	1/2"	5/8"	3/4"
HOLE DIAMETER	9/16"	11/16	13/16"
EMBEDMENT FOR #4@ STD.	4 1/4"	5"	6 5/8"
MAX. TORQUE (ft.-lbs)	30	75	150

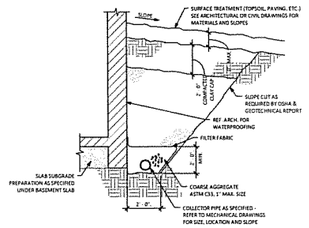
1 TYPICAL DETAIL
ADHESIVE ANCHOR FOR SOLID & GROUTED MASONRY & CONCRETE
NO SCALE



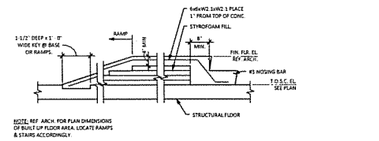
ADHESIVE DOWEL NOTES:

1. REF. GENERAL NOTES FOR ADHESIVE DOWELING SYSTEMS.
2. LOCATE EXISTING REINFORCING STEEL IN THE CONCRETE USING NON-DESTRUCTIVE METHODS & POSITION DOWEL LOCATIONS TO AVOID CONFLICTS WITH EXISTING REINFORCING.
3. ALL ABANDONED HOLES SHALL BE FILLED WITH NONSHRINK GROUT.

2 TYPICAL DETAIL
ADHESIVE DOWELING
NO SCALE

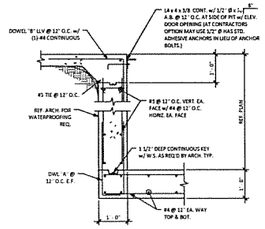


3 TYPICAL CONCRETE DETAIL - BACKFILL
NO SCALE

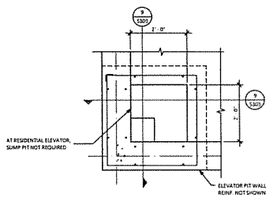


NOTE: REF. ARCH. FOR PLAN DIMENSIONS OF BUILT-UP FLOOR AREA. LOCATE RAMPS & STAIRS ACCORDINGLY.

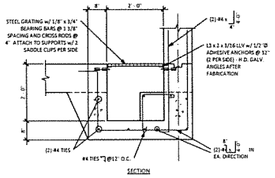
4 TYPICAL DETAIL
BUILT-UP FLOOR CONSTRUCTION
NO SCALE



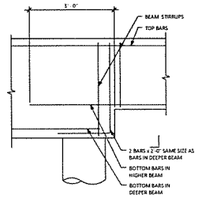
7 TYPICAL DETAIL
ELEVATOR PIT WALL
NO SCALE



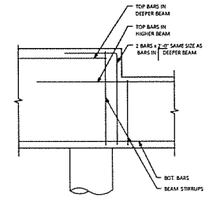
8 TYPICAL DETAIL
ELEVATOR SUMP PIT PLAN
NO SCALE



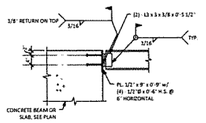
9 TYPICAL DETAIL
ELEVATOR PITWALL SECTION
NO SCALE



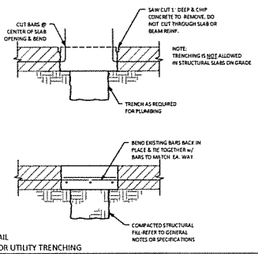
11 TYPICAL DETAIL
STEP IN BOTTOM GRADE BEAM
NO SCALE



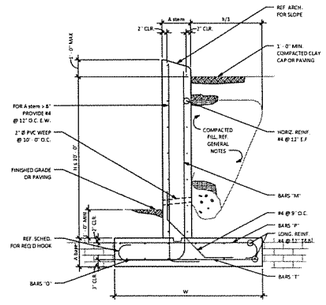
11A TYPICAL DETAIL
STEP IN TOP GRADE BEAM
NO SCALE



5 TYPICAL DETAIL ELEVATOR DIVIDER BEAM
NO SCALE



6 TYPICAL DETAIL
S.O.G. CUT FOR UTILITY TRENCHING
NO SCALE



10 TYPICAL DETAIL - RETAINING WALL
NO SCALE

H	DESIGN SOIL PRESSURE = 45 psf											
	CONCRETE DIMENSIONS							REINFORCING BARS				
	A base	A stem	W	C	D	K	"T"	"D"	"M"	"F"	"D"	SPLICE
0'-5"	1'-0"	0'-8"	1'-3"	1'-10"	-	-	#4@18	#4@9 HK	-	#4@9 HK	-	-
>5-8	1'-1"	0'-10"	1'-4"	2'-10"	0'-9"	0'-10"	#4@18	#5@9	-	#4@9	-	-
>8'-10"	1'-1"	0'-10"	1'-6"	4'-2"	1'-0"	0'-10"	#4@18	#7@9	-	#5@12	-	-

NOTES:
1. "HK" DENOTES HOOK END AT TOE FOR "D" BARS & AT HEEL FOR "F" BARS.
2. "D" BARS THAT ARE NOT SPLICED (ALT. BARS) SHALL HAVE THE SAME LENGTH AS THE SPLICED BARS.
3. "D" BARS SHALL EXTEND 2'-0" PAST TOP OF FOOTING.

1102 West Texas Avenue
Midland, Texas 79701
432. 682. 1262
432. 682. 1297 fax

rwa
rhotenberry weiten architects

aec
Architectural Engineering Collaboration

STATE OF TEXAS
SEN-GIN LIU
101153
LICENSED
PROFESSIONAL ENGINEER

04.08.2016

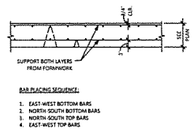
Sheffield Residence
3509 Westlake Drive
Austin, TX

JOB NO. 13067

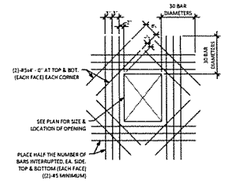
DRAWING TITLE
CONCRETE TYPICAL DETAILS

REVISIONS
△
△
△
△

DATE 04/08/16
DRAWN BY N.K., J.C.
CHECKED BY R.L.
SHEET NO.
S303



1 TWO-WAY SLAB BAR PLACEMENT
NO SCALE



SLAB OPENING REBAR PLACEMENT
2 IN MILD REINF. TWO-WAY SLAB
NO SCALE

1102 West Texas Avenue
Midland, Texas 79701
432.682.1292
432.682.1297 fax

rwa
rhoenberry
weiten
architects

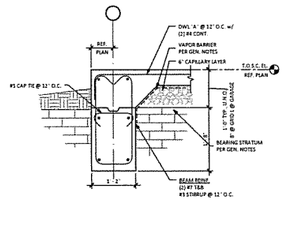
aec Architectural Engineering Collaborative

STATE OF TEXAS
SEN-GIN LIU
101153
LICENSED
PROFESSIONAL ENGINEER

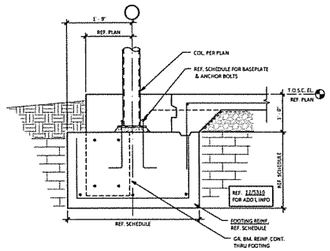
Sen-Gin Liu
04.08.2016

Sheffield Residence
3509 Westlake Drive
Austin, TX

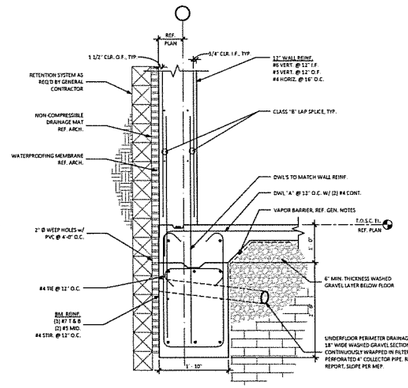
JOB NO. 13067
DRAWING TITLE
TWO-WAY SLAB DETAILS
REVISIONS
△
△
△
△
DATE 04/08/16
DRAWN BY N.K. J.C.
CHECKED BY R.L.
SHEET NO.
S304



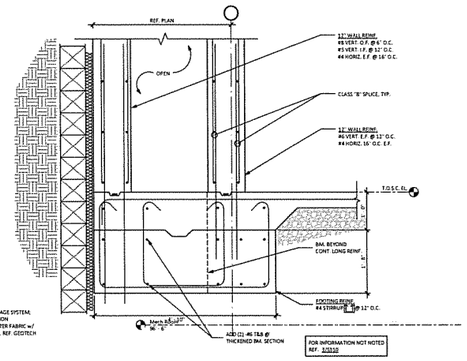
1 DETAIL - PERIMETER GRADE BEAM
SCALE: 1" = 1'-0"



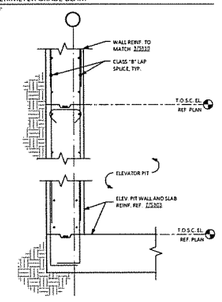
2 DETAIL - PERIMETER FOOTING
SCALE: 1" = 1'-0"



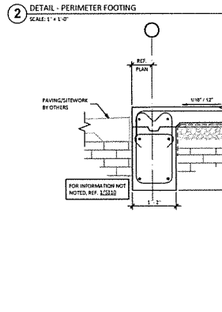
3 CONCRETE WALL TO GRADE BEAM SECTION
SCALE: 1" = 1'-0"



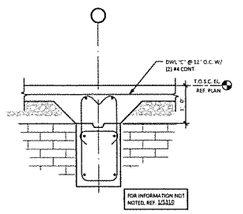
4 DETAIL - BASEMENT/RETAINING WALL FOOTING
SCALE: 1" = 1'-0"



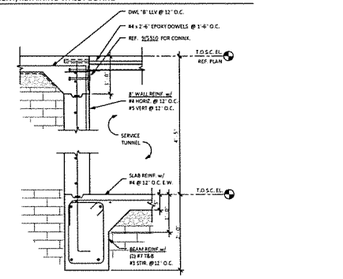
5 DETAIL - PERIMETER ELEVATOR PIT WALL
SCALE: 1" = 1'-0"



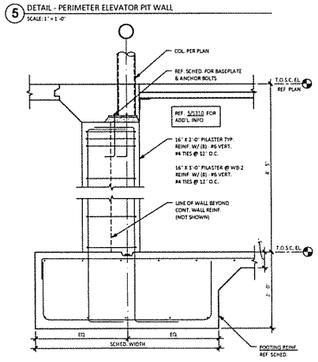
6 DETAIL - PERIMETER GRADE BEAM AT GARAGE
SCALE: 1" = 1'-0"



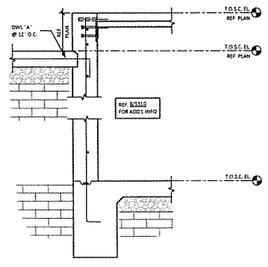
7 DETAIL - TYPICAL INTERIOR GRADE BEAM
SCALE: 1" = 1'-0"



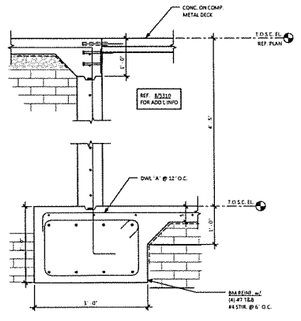
8 SERVICE TUNNEL SECTION
SCALE: 1" = 1'-0"



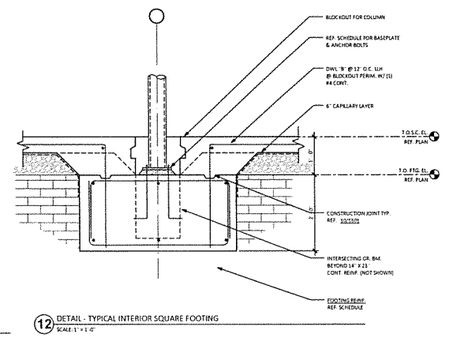
9 DETAIL - PILASTER AT SERVICE TUNNEL
SCALE: 1" = 1'-0"



10 DETAIL - DROP IN SLAB AT SERVICE TUNNEL
SCALE: 1" = 1'-0"



11 DETAIL - STRIP FOOTING AT WINDBRACE
SCALE: 1" = 1'-0"



12 DETAIL - TYPICAL INTERIOR SQUARE FOOTING
SCALE: 1" = 1'-0"

rwa
rhotenberry weiten architects
1102 West Texas Avenue
Midland, Texas 79701
432.682.1252
432.682.1537 fax

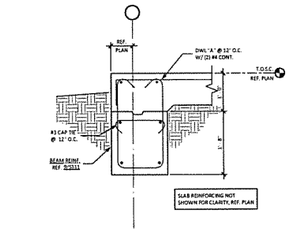
aec Architectural Engineering Collaborative

STATE OF TEXAS
SEN-GIN LIU
101153
LICENSED
PROFESSIONAL ENGINEER
04.08.2016

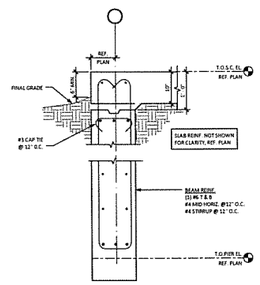
Sheffield Residence
3509 Westlake Drive
Austin, TX

JOB NO. 13067
DRAWN/STITLE
FOUNDATION DETAILS
REVISIONS
DATE 04/05/16
DRAWN BY N.K., J.C.
CHECKED BY R.L.
SHEET NO. S310

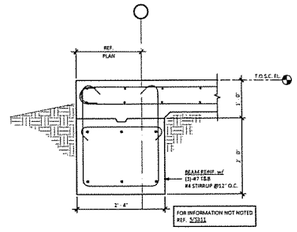
1" = 30'



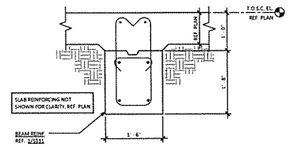
1 DETAIL - GRADE BEAM AT STRUCTURAL SLAB
SCALE: 1" = 1'-0"



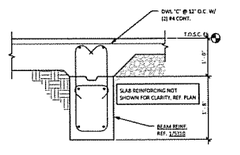
2 DETAIL - DEEP GRADE BEAM AT STRUCTURAL SLAB
SCALE: 1" = 1'-0"



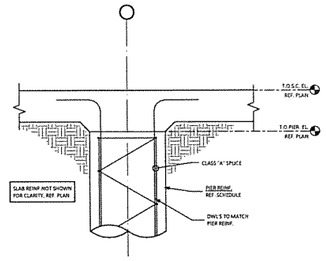
3 DETAIL - WIDENED GRADE BEAM AT STRUCTURAL SLAB
SCALE: 1" = 1'-0"



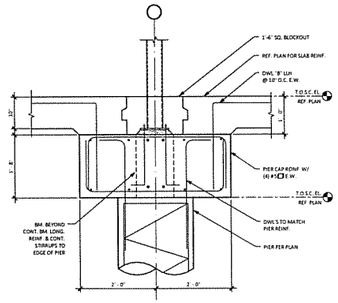
5 DETAIL - INTERIOR GRADE BEAM AT STRUCTURAL SLAB
SCALE: 1" = 1'-0"



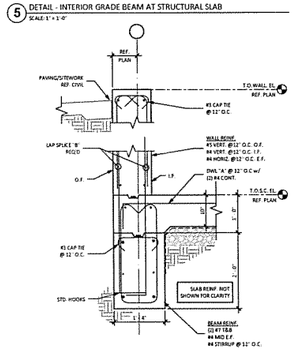
6 SLAB TO STRUCTURAL SLAB TRANSITION
SCALE: 1" = 1'-0"



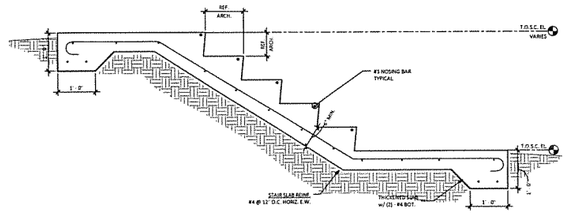
7 DETAIL - INTERIOR PIER AT STRUCTURAL SLAB
SCALE: 1" = 1'-0"



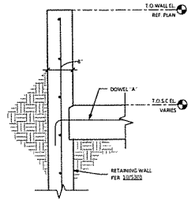
8 INTERIOR PIER CAP
SCALE: 1" = 1'-0"



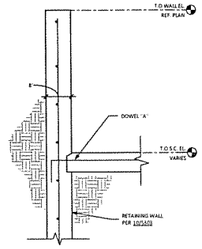
9 DETAIL - RETAINING WALL AT STRUCTURAL SLAB
SCALE: 1" = 1'-0"



10 DETAIL - LANDING TO STAIR
SCALE: 1" = 1'-0"



11 DETAIL - STAIR STEP TO RETAINING WALL
SCALE: 1" = 1'-0"



12 DETAIL - STAIR LANDING AT RETAINING WALL
SCALE: 1" = 1'-0"

rhotenberry weiltan architects
1102 West Texas Avenue
Midland, Texas 79701
432.682.1522
432.682.1257 fax

aec Architectural Engineering Consultants

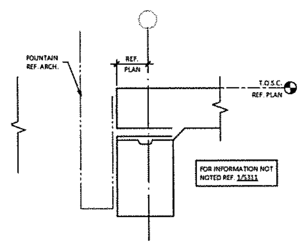
STATE OF TEXAS
SEN-GIN LIU
101153
LICENSED
PROFESSIONAL ENGINEER

Sen-Gin Liu
04.08.2016

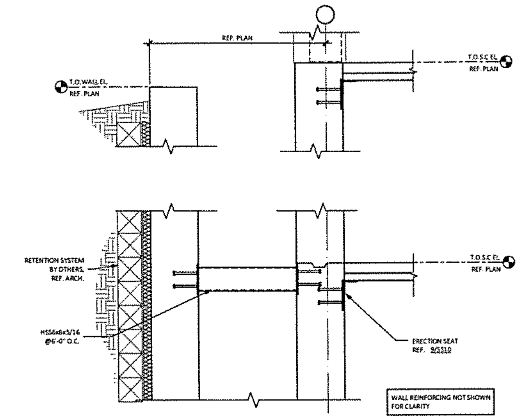
Sheffield Residence
3509 Westlake Drive
Austin, TX

JOB NO. 13067
DRAWING TITLE
FOUNDATION DETAILS
REVISIONS
△
△
△
△
DATE 04/08/16
DRAWN BY N.K., J.C.
CHECKED BY R.L.
SHEET NO.
S311

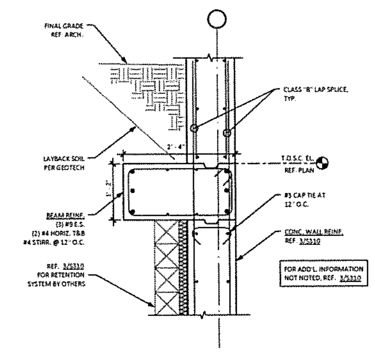
1"=30'



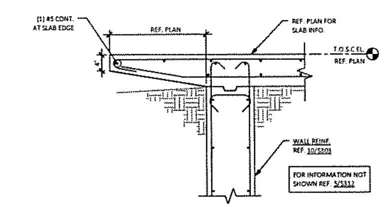
1 DETAIL - DEEP CONCRETE GRADE BEAM
SCALE: 1" = 1'-0"



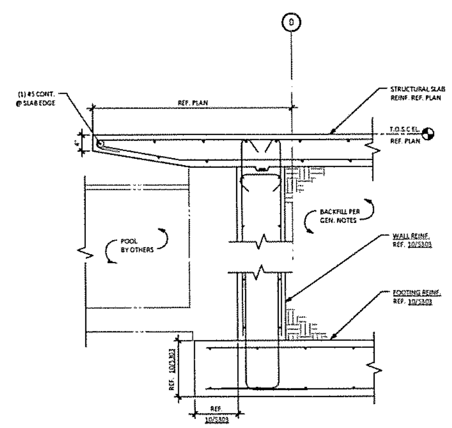
2 DETAIL - RETAINING WALL INTERMEDIATE BRACE
SCALE: 1" = 1'-0"



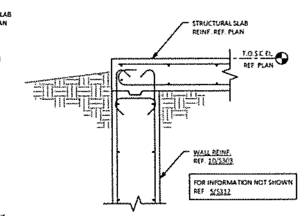
3 DETAIL - INTERMEDIATE BRACE AT BASEMENT WALL
SCALE: 1" = 1'-0"



4 DETAIL - SLAB OVERHANG AT RETAINING WALL
SCALE: 1" = 1'-0"

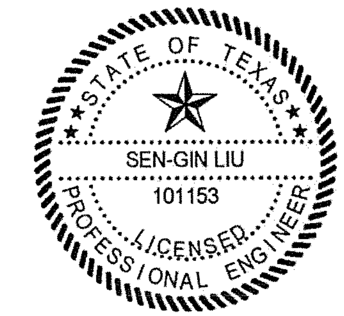


5 DETAIL - SLAB OVERHANG AT POOL
SCALE: 1" = 1'-0"



6 DETAIL - STRUCTURAL SLAB AT CONC. WALL
SCALE: 1" = 1'-0"

1" = 30'



Sen-Gin Liu
04.08.2016

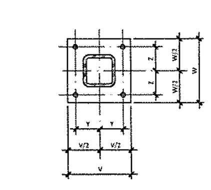
1102 West Texas Avenue
Midland, Texas 79701
432.682.1252
432.682.1257 fax

rwa
rhotenberry
wellen
architects

aeC Architectural Engineers Collaborative

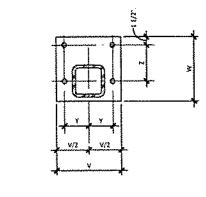
Sheffield Residence
3509 Westlake Drive
Austin, TX

JOB NO. 13067
DRAWINGTITLE
FOUNDATION DETAILS
REVISIONS
△
△
△
△
DATE 04/08/16
DRAWN BY Author
CHECKED BY Checker
SHEET NO.
S312



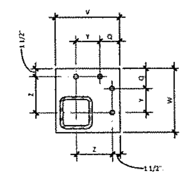
NOTES:
1. WELD TO BE 1/16" SMALLER THAN THICKNESS OF TUBE.
2. SEE DETAIL 9/S501 FOR BASE PLATE ELEVATION.

(1) TYPICAL DETAIL
BASE PLATE - 4 BOLTS
NO SCALE



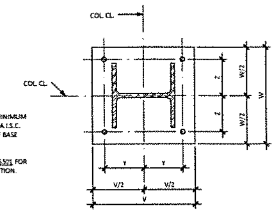
NOTES:
1. WELD TO BE 1/16" SMALLER THAN THICKNESS OF TUBE.
2. SEE DETAIL 9/S501 FOR BASE PLATE ELEVATION.

(2) TYPICAL DETAIL
BASE PLATE - EDGE COLUMN
NO SCALE



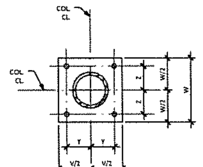
NOTES:
1. WELD TO BE 1/16" SMALLER THAN THICKNESS OF TUBE.
2. SEE DETAIL 9/S501 FOR BASE PLATE ELEVATION.

(3) TYPICAL DETAIL
BASE PLATE - CORNER COLUMN
NO SCALE



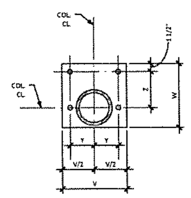
NOTES:
1. WELD TO BE MINIMUM SIZE REQUIRED BY A.I.S.C. FOR THICKNESS OF BASE PLATE USED.
2. SEE DETAIL 9/S501 FOR BASE PLATE ELEVATION.

(4) TYPICAL DETAIL
BASE PLATE - 4 BOLTS
NO SCALE



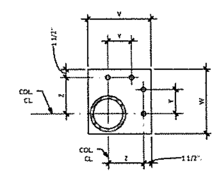
NOTES:
1. WELD TO BE 1/16" SMALLER THAN THICKNESS OF TUBE.
2. SEE DETAIL 9/S501 FOR BASE PLATE ELEVATION.

(5) TYPICAL DETAIL
BASE PLATE - 4 BOLTS
NO SCALE



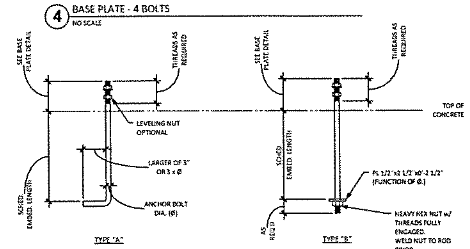
NOTES:
1. WELD TO BE 1/16" SMALLER THAN THICKNESS OF TUBE.
2. SEE DETAIL 9/S501 FOR BASE PLATE ELEVATION.

(6) TYPICAL DETAIL
BASE PLATE - EDGE COLUMN
NO SCALE



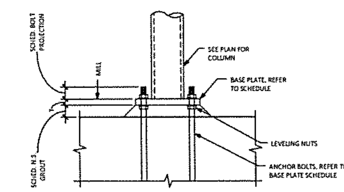
NOTES:
1. WELD TO BE 1/16" SMALLER THAN THICKNESS OF TUBE.
2. SEE DETAIL 9/S501 FOR BASE PLATE ELEVATION.

(7) TYPICAL DETAIL
BASE PLATE - CORNER COLUMN
NO SCALE



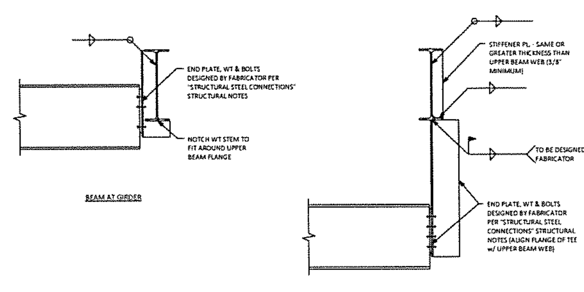
NOTES:
1. USE TYPE "A" ROD, TYPICAL, UNLESS NOTED OTHERWISE.
2. USE TYPE "B" ROD AT ALL WINDBRACE LOCATIONS.
3. REF S500 FOR WINDBRACE ELEVATIONS.

(8) TYPICAL DETAIL
ANCHOR ROD
NO SCALE



BOLT PROJECTION AND GROUT THICKNESS SCHEDULE	
ANCHOR BOLT DIAMETER	BOLT PROJECTION & GROUT THICKNESS
1" OR LESS	1 1/2"
1 1/8" TO 1 1/2"	2"
1 3/4" TO 2"	2 1/2"
2 1/4" TO 2 1/2"	3"

(9) TYPICAL DETAIL
COLUMN BASE PLATES
NO SCALE



(10) TYPICAL STEEL DETAIL
NO SCALE

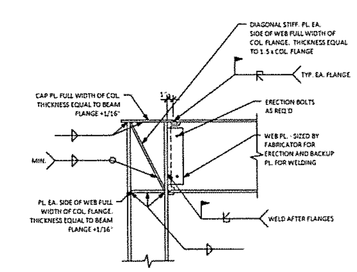
BASE PLATE SCHEDULE (NEW)

MARK	BASE PLATE DETAIL	ANCHOR BOLT				BASE PLATE "T"	BASE PLATE "V"	BASE PLATE "W"	BASE PLATE "Y"	BASE PLATE "Z"	BASE PLATE "Q"
		TYPE	NUMBER	SIZE	LENGTH						
BP-1	1/S5.01	A	4	3/4"	1' - 6"	1"	11"	11"	3 1/2"	3 1/2"	
BP-2	5/S5.01	A	4	3/4"	1' - 6"	1"	11"	11"	3 1/2"	3 1/2"	
BP-3											
BP-4	6/S5.01			3/4"	1' - 6"	1"					
BP-5	11/S5.01	B	4	1"	1' - 6"	1"	0"	0"	0"	0"	
BP-6		A	4	3/4"	1' - 6"	1"	11"	11"	3"	6"	3"
BP-7	4/S5.01	B	4	1"	1' - 6"	1"	11"	11"	3 1/2"	3 1/2"	

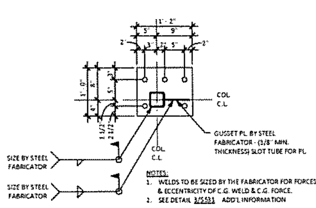
ANCHOR ROD HOLES IN BASE PLATE

ANCHOR ROD DIAMETER	HOLE DIAMETER	MIN. WASHER DIMENSION	MIN. WASHER THICKNESS
3/4"	1 5/16"	2"	1/4"
7/8"	1 9/16"	2 1/2"	5/16"
1"	1 13/16"	3"	3/8"
1 1/4"	2 1/16"	3"	1/2"
1 1/2"	2 5/16"	3 1/2"	1/2"
1 3/4"	2 3/4"	4"	5/8"
2"	3 1/4"	5"	3/4"
2 1/2"	3 1/4"	5 1/2"	7/8"

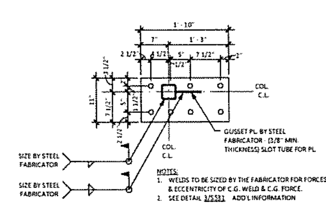
(11) SCHEDULE - ANCHOR ROD HOLES IN BASE PLATE
NO SCALE



(12) TYPICAL DETAIL
MOMENT CONNECTION
NO SCALE



(13) TYPICAL DETAIL
BASE PLATE - 5 BOLTS
NO SCALE



(14) TYPICAL DETAIL
BASE PLATE - 7 BOLTS
NO SCALE

rwa
rhotenberry wellen architects
1102 West Texas Avenue
Midland, Texas 79701
432 682 1252
432 682 1257 fax

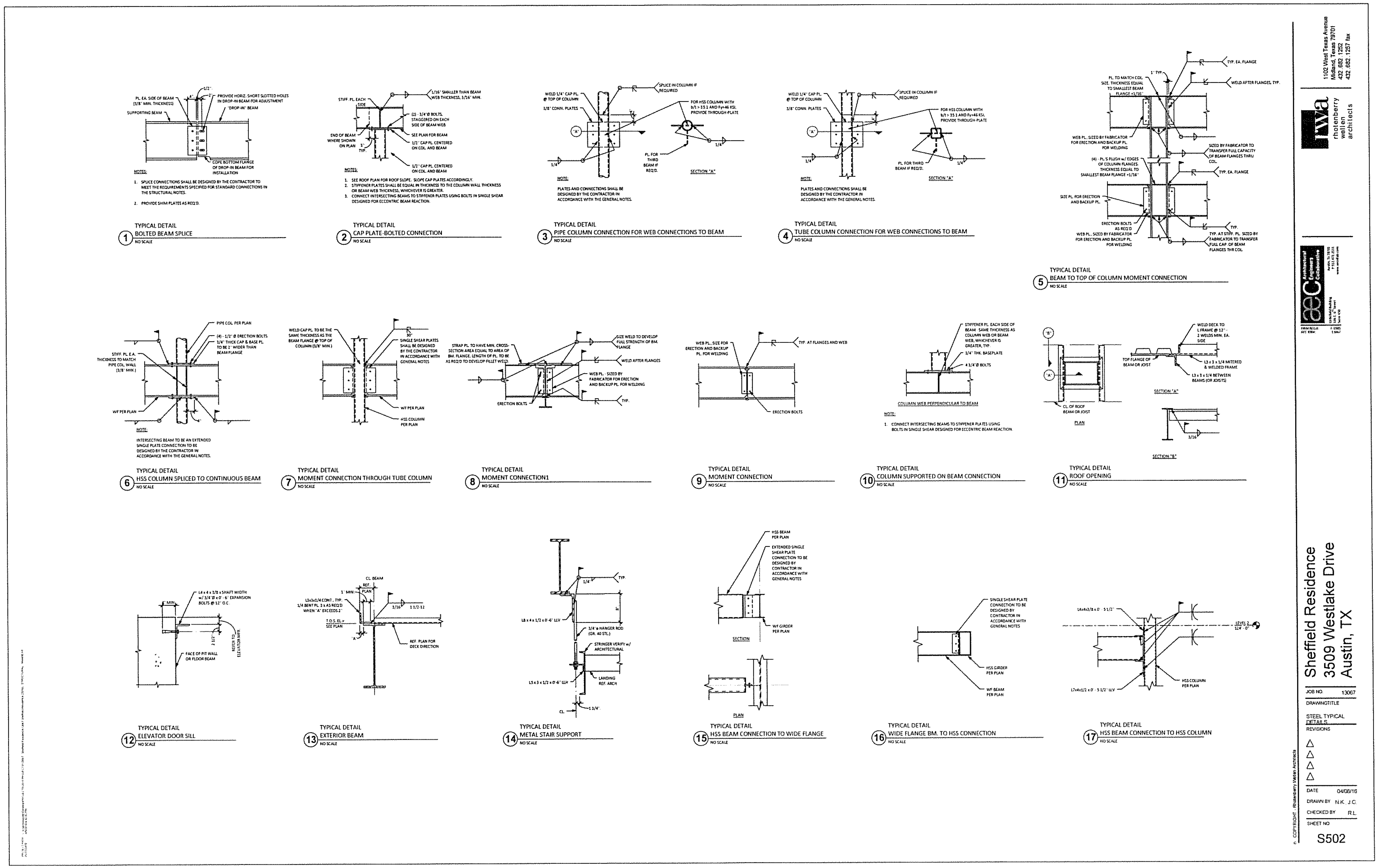
aec

Sheffield Residence
3509 Westlake Drive
Austin, TX

JOB NO 13067
DRAWING TITLE
STEEL TYPICAL DETAILS
REVISIONS
△
△
△
△
DATE 04/08/16
DRAWN BY N.K., J.C.
CHECKED BY R.L.
SHEET NO.
S501

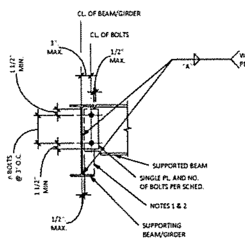
STATE OF TEXAS
SEN-GIN LIU
101153
LICENSED
PROFESSIONAL ENGINEER

04.08.2016



STATE OF TEXAS
SEN-GIN LIU
101153
LICENSED
PROFESSIONAL ENGINEER

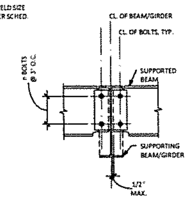
04.08.2016



NOTES:

1. IF SUPPORTED BEAM IS LESS THAN 1/2 OF BOLTS TO CONNECTION AT GIRDER.
2. EXTEND TAB PLATE TO BOTTOM FLANGE AT PERIMETER CONDITION.

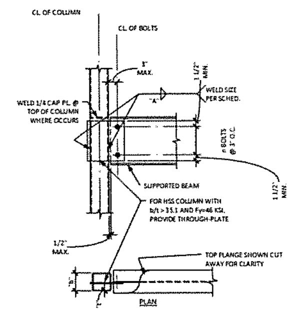
(A) ONE-SIDED CONNECTION - BEAMS TO GIRDER



NOTE:

REF. DETAIL "A" FOR INFO NOT SHOWN

(B) TWO-SIDED CONNECTION - BEAMS TO GIRDER



NOTES:

1. PIPE COLUMN CONNECTION IS SIMILAR.
2. SINGLE SHEAR PLATE CONNECTION SHOWN APPLIES TO RIGHT ANGLE CONNECTIONS AND SKEWED CONNECTIONS UP TO 30° FROM RIGHT ANGLE.

(C) EXTENDED PLATE BEAM TO COLUMN WEB CONNECTION

STANDARD SINGLE PLATE CONNECTION					
BEAM SIZE	NO. OF ROWS OF BOLTS(n)	BOLT DIAMETER	PLATE THICKNESS	WELD SIZE A	MAX. BEAM REACTION (KIPS)
W8	2	3/4"	1/4"	1/4"	12
W10	2				16
W12	3				24
W14	3		5/16"		30
W16	4				40
W18	5				50
W21	6	7/8"	3/8"		73
W24	7				85
W27	8				97
W30	8				97
W33	8				97
W36	10		1/2"	5/16"	140
W40	10				140
W44	10				140

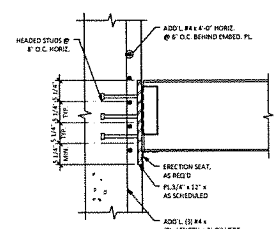
NOTES:

1. ALL OTHER CONNECTIONS DEVIATING FROM TYPICAL CONNECTIONS SHALL BE DESIGNED AND DETAILED BY A PROFESSIONAL ENGINEER WORKING UNDER THE GUIDANCE OF THE CONTRACTOR. REF. GENERAL NOTES UNDER "STRUCTURAL STEEL CONNECTIONS."
2. NOTED REACTIONS ARE FOR SERVICE LOADS.
3. BOLTS ARE A325N WITH STANDARD HOLES.
4. SCHEDULED SHEAR PLATE CONNECTIONS APPLY TO RIGHT ANGLE CONNECTIONS AND SKEWED CONNECTIONS UP TO 30° FROM RIGHT ANGLE.
5. BEAM CONNECTIONS ARE "STANDARD" UNLESS OTHERWISE NOTED ON PLAN.
6. WORKLINES ARE ON CENTERLINES OF BEAMS AND COLUMNS, U.O.N.
7. WELD CAPACITY BASED ON Exx = 70 KSI.
8. CONTRACTOR RESPONSIBLE FOR MEETING ALL O.S.H.A. REQUIREMENTS.

(D) SINGLE PLATE CONNECTION SCHEDULE

TYPICAL DETAIL
(1) SCHEMATIC SINGLE-PLATE FRAMING CONNECTIONS

NO SCALE



MAX. ALLOWABLE END REACTION (SERVICE LOADS_KIPS)	NUMBER OF STUDS	PLATE LENGTH (NOTE 4)
20 K	4	1'-2"
40 K	6	1'-7"
55 K	8	2'-0"
75 K	10	2'-5"
95 K	12	2'-10"
115 K	14	3'-3"
140 K	16	3'-8"
160 K	18	4'-1"

NOTES:

1. PROVIDE EMBED PLATE TO EQUAL OR EXCEED BEAM REACTION AS SPECIFIED FOR BEAM CONNECTION DESIGN.
2. DOUBLE ANGLE CONNECTION SHALL BE DESIGNED AND DETAILED BY A PROFESSIONAL ENGINEER WORKING UNDER THE GUIDANCE OF THE CONTRACTOR. REF. GENERAL NOTES UNDER "STRUCTURAL STEEL CONNECTIONS."
3. HEADED STUDS SHALL BE 7/8"Ø x 0'-7".
4. PROVIDE EXTRA PLATE LENGTH AS REQ'D FOR ERECTION SEAT AT CONTRACTOR'S OPTION.
5. CONTRACTOR RESPONSIBLE FOR COORDINATING CONFLICTS WITH ARCH'L.

TYPICAL DETAIL
(5) STEEL BEAM TO CONCRETE CONNECTION

NO SCALE

rwa
rhotenberry wellen architects
1102 West Texas Avenue
Midland, Texas 79701
432.682.1252
432.682.1257 fax

aec Architectural Engineers Collaborative

Sheffield Residence
3509 Westlake Drive
Austin, TX

JOB NO. 13067

DRAWINGTITLE

STEEL TYPICAL DETAILS

REVISIONS

△
△
△
△

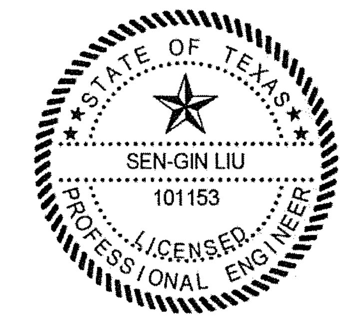
DATE 04/08/16

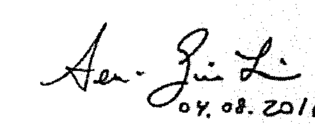
DRAWN BY N.K., J.C.

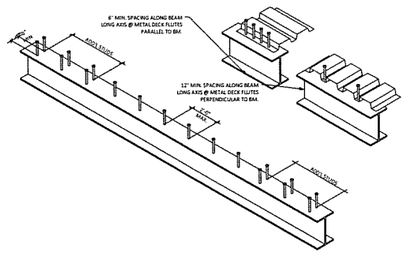
CHECKED BY R.L.

SHEET NO.

S503



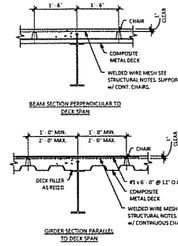




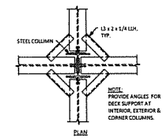
NOTES:

1. DETERMINE WHERE ALL STUDS ARE TO BE PLACED BEFORE WELDING TO BEAM. SEE DETAIL FOR STUD SPACING AND EDGE DISTANCE REQUIREMENTS.
2. FOR UNIFORMLY DISTRIBUTED STUDS - PLACE HALF OF THE TOTAL NUMBER OF STUDS EACH SIDE OF THE BEAM MIDSPAN FOR NON-UNIFORMLY DISTRIBUTED STUDS - PLACE NUMBER STUDS BETWEEN BEAMS AS NOTED ON PLAN.
3. AT BEAMS PERPENDICULAR TO DECK FLUTES: STARTING FROM THE END SUPPORT PLACE SHEAR STUDS UNIFORMLY TOWARDS THE MIDSPAN. MAX SPACING SHALL NOT EXCEED 24 INCHES. FOR REMAINING STUDS, BEGIN FROM EACH END AND PLACE STUDS AT REMAINING FLUTES WITHOUT STUDS. WHERE REQUIRED NUMBER OF STUDS EXCEEDS SINGLE STUDS PER FLUTE, PLACE EXTRA STUDS IN PAIRS (1 1/2" EACH SIDE OF BEAM WEB, STARTING AT EACH END OF BEAM. WHERE REQUIRED NUMBER OF STUDS EXCEEDS PAIRS, PLACE EXTRA STUDS IN TRIOS (ONE AT CENTER, PLUS 3" EACH SIDE OF BEAM WEB, STARTING AT EACH END OF BEAM.
4. AT BEAMS PARALLEL TO DECK FLUTES: STARTING FROM EACH END PLACE SHEAR STUDS EVENLY SPACED ALONG EACH SECTION OF BEAM, SPACED NO CLOSER THAN 6" ON CENTER. WHERE REQUIRED NUMBER OF STUDS EXCEEDS SINGLE LINE SPACED 6" ON CENTER, PLACE EXTRA STUDS IN PAIRS OR TRIOS AS DESCRIBED IN PREVIOUS NOTE. MAX. SPACING OF STUDS SHALL NOT EXCEED 24 INCHES.

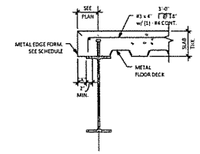
1 TYPICAL DETAIL
SHEAR STUD PLACEMENT DIAGRAM
NO SCALE



2 TYPICAL DETAIL
COMPOSITE DECK
NO SCALE



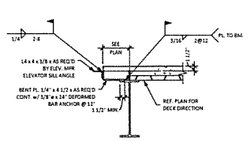
3 TYPICAL DETAIL
DECK SUPPORT AT WF COLUMN
NO SCALE



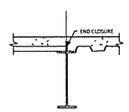
4 TYPICAL DETAIL
COMPOSITE SLAB EDGE CONDITION
NO SCALE

MAXIMUM SLAB OVERHANG-"A"			
EDGE FORM GAUGE	SLAB THICKNESS		
	4 1/2"	5 1/2"	6 1/2"
16 GA.	6"	4"	2"
14 GA.	7"	6"	4"
12 GA.	10"	9"	8"
10 GA.	12"	11"	10"

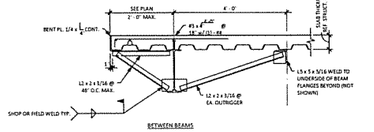
DIMENSION "A" EXCEEDS TABLE MAXIMUMS, PROVIDE ANGLE SUPPORT. PER DETAIL 3/S4XX.
PROVIDE 1/2" RETURN UP ON 16 GA. EDGE FORMS.

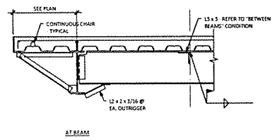


5 TYPICAL DETAIL
EDGE CONDITION AT STAIR STRINGERS AND ELEVATOR SILL
NO SCALE

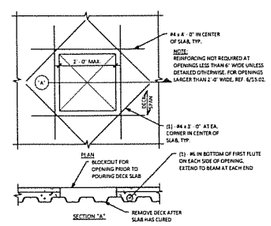


6 TYPICAL DETAIL
CHANGE OF DECK DIRECTION OVER BEAM
NO SCALE

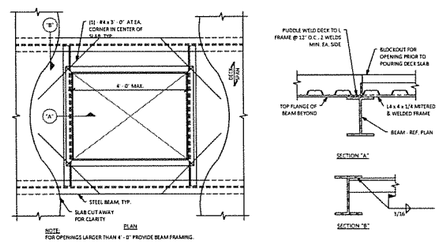




7 TYPICAL DETAIL
DECK OVERHANGING SPANDREL BEAM
NO SCALE



8 TYPICAL DETAIL
SMALL MECHANICAL OPENING IN COMPOSITE SLAB
NO SCALE



9 TYPICAL DETAIL
LARGE MECHANICAL OPENING IN COMPOSITE SLAB
NO SCALE

1102 West Texas Avenue
Midland, Texas 79701
432 682 1522
432 682 1527 fax

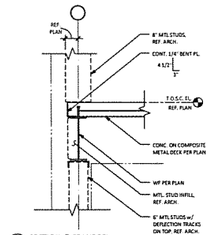
rwa
rhotenberry weller architects

aec Architectural Engineering Collaborative

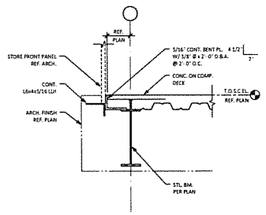
Sen-Gin Liu
04.08.2016

Sheffield Residence
3509 Westlake Drive
Austin, TX

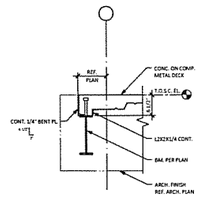
JOB NO. 13067
DRAWING TITLE
COMPOSITE STEEL TYPICAL DETAILS
REVISIONS
△
△
△
△
DATE 04/08/16
DRAWN BY N.K., J.C.
CHECKED BY R.L.
SHEET NO.
S504



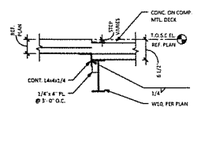
1 SECTION @ SPANDREL
SCALE: 1" = 1'-0"



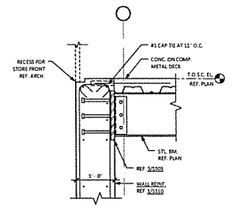
2 SECTION
SCALE: 1" = 1'-0"



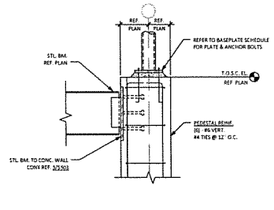
3 SECTION
SCALE: 1" = 1'-0"



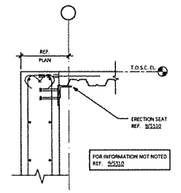
4 DETAIL - STEP AT CONC. ON METAL DECK
SCALE: 1" = 1'-0"



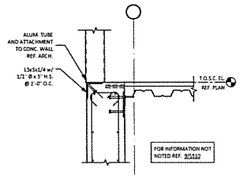
5 DETAIL - BEAM TO TOP OF CONC. WALL CONNECTION
SCALE: 1" = 1'-0"



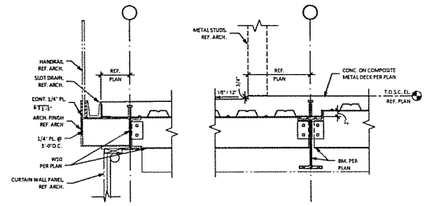
6 DETAIL - WALL BUMPOUT AT COLUMN
SCALE: 1" = 1'-0"



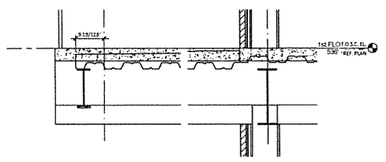
7 DETAIL - COMP. DECK TO CONC. WALL
SCALE: 1" = 1'-0"



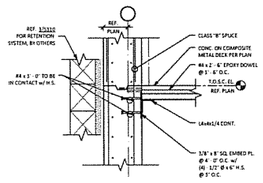
7A DETAIL - ARCHITECTURAL TUBE AT CONC. WALL
SCALE: 1" = 1'-0"



8 DETAIL - PORCH
SCALE: 1" = 1'-0"



8A Section 250
SCALE: 1" = 1'-0"



9 SECTION
SCALE: 1" = 1'-0"

1"=30'

1102 West Texas Avenue
Midland, Texas 79701
432.682.1252
432.682.1257 fax

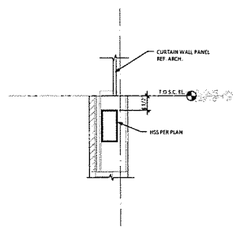
rwa rhotenberry weiler architects

aec Architectural Engineering Consultants

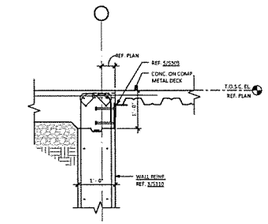
04.08.2016

Sheffield Residence
3509 Westlake Drive
Austin, TX

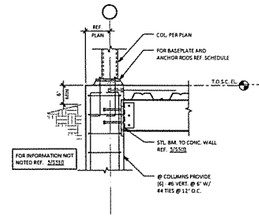
JOB NO. 13067
DRAWING TITLE
STEEL DETAILS
REVISIONS
DATE 04/08/16
DRAWN BY N.K., J.C.
CHECKED BY R.L.
SHEET NO.
S510



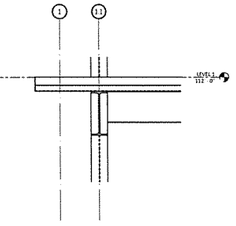
1 DETAIL - INTERMEDIATE CURTAIN WALL SUPPORT
SCALE: 1" = 1'-0"



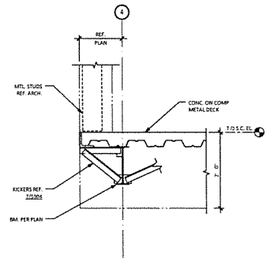
2 DETAIL - COMP. DECK TO CONC. WALL AND SLAB
SCALE: 1" = 1'-0"



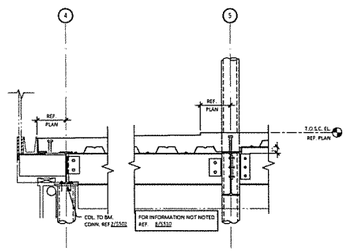
3 COLUMN BASEPLATE DETAIL
SCALE: 1" = 1'-0"



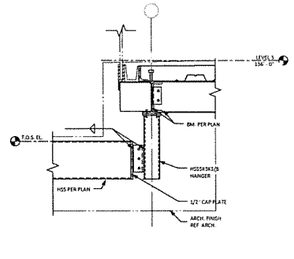
4 DETAIL - EDGE AT SECOND FLOOR PORCH
SCALE: 1" = 1'-0"



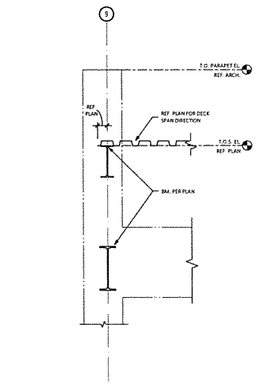
5 DETAIL - DECK EDGE AT LIVING ROOM
SCALE: 1" = 1'-0"



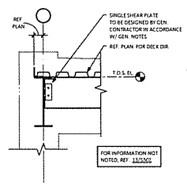
8 DETAIL - PORCH SECTION
SCALE: 1" = 1'-0"



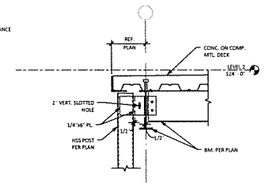
9 3RD FLOOR HANGER CONNECTION
SCALE: 1" = 1'-0"



10 DETAIL - PARAPET AT ELEVATOR
SCALE: 1" = 1'-0"



11 DETAIL - ROOF EDGE SECTION
SCALE: 1" = 1'-0"



12 DETAIL - HSS POST TO BOTTOM OF BEAM CONN.
SCALE: 1" = 1'-0"

1"=30'

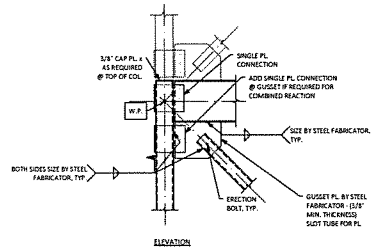
1102 West Texas Avenue
Midland, Texas 79701
432 682 1252
432 682 1257 fax

rwa
rhotenberry wallen architects

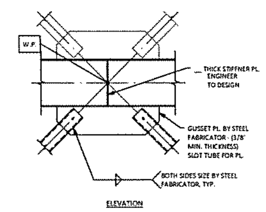
aec Architectural Engineers Collaborative

Sheffield Residence
3509 Westlake Drive
Austin, TX

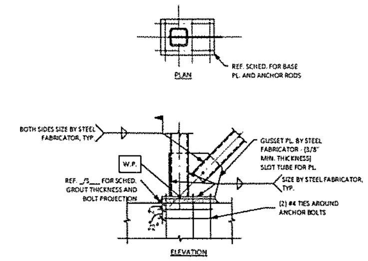
JOB NO. 13067
DRAWN/TITLE
STEEL DETAILS
REVISIONS
△
△
△
△
DATE 04/08/16
DRAWN BY N.K., J.C.
CHECKED BY R.L.
SHEET NO.
S511



1 TYPICAL DETAIL
WIDE FLANGE BEAM AND WIND BRACE CONNECTION TO TUBE COLUMN
NO SCALE



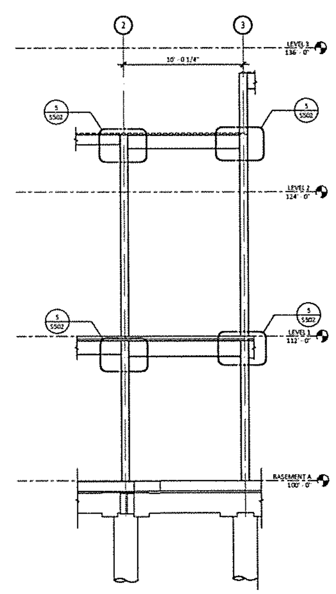
2 TYPICAL DETAIL
WIND BRACE CONNECTION TO BEAM
NO SCALE



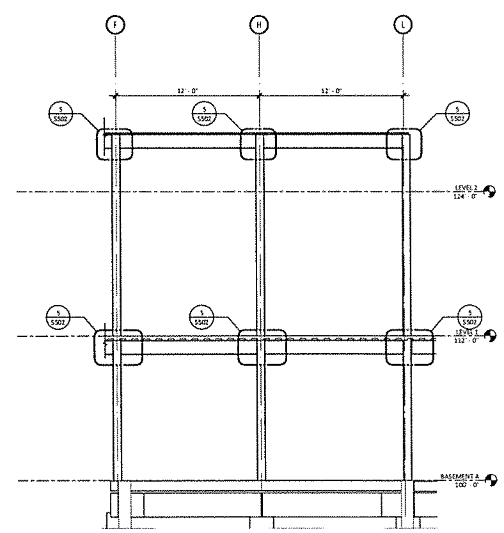
3 TYPICAL DETAIL
WIND BRACE CONNECTION TO TUBE COLUMN AND BASE PLATE
NO SCALE

WIND BRACE DESIGN NOTES:

1. Design connections for forces shown on wind brace elevations.
2. If no forces are shown on wind brace elevations, design for the full tensile capacity of the braces according to the Manual of American Institute of Steel Construction, Thirteenth Edition.
3. Size welds for forces & eccentricity of C.G. weld & C.G. force.
4. At beam to column connections, size attachment to column for combined gravity load shear plus vertical shear component due to lateral load.
5. Check for Whitmore section buckling, and block shear rupture of gusset plates.
6. Calculations shall be performed and sealed by a Registered Professional Engineer & shall be submitted to the Architect per specifications.
7. Design forces noted as H=_K are factored forces in axial tension or compression. V=_k are factored vertical shear forces.



4 ELEVATION - MOMENT FRAME
SCALE: 1/4" = 1'-0"



5 MOMENT FRAME - 2
SCALE: 1/4" = 1'-0"

1/16" = 1'

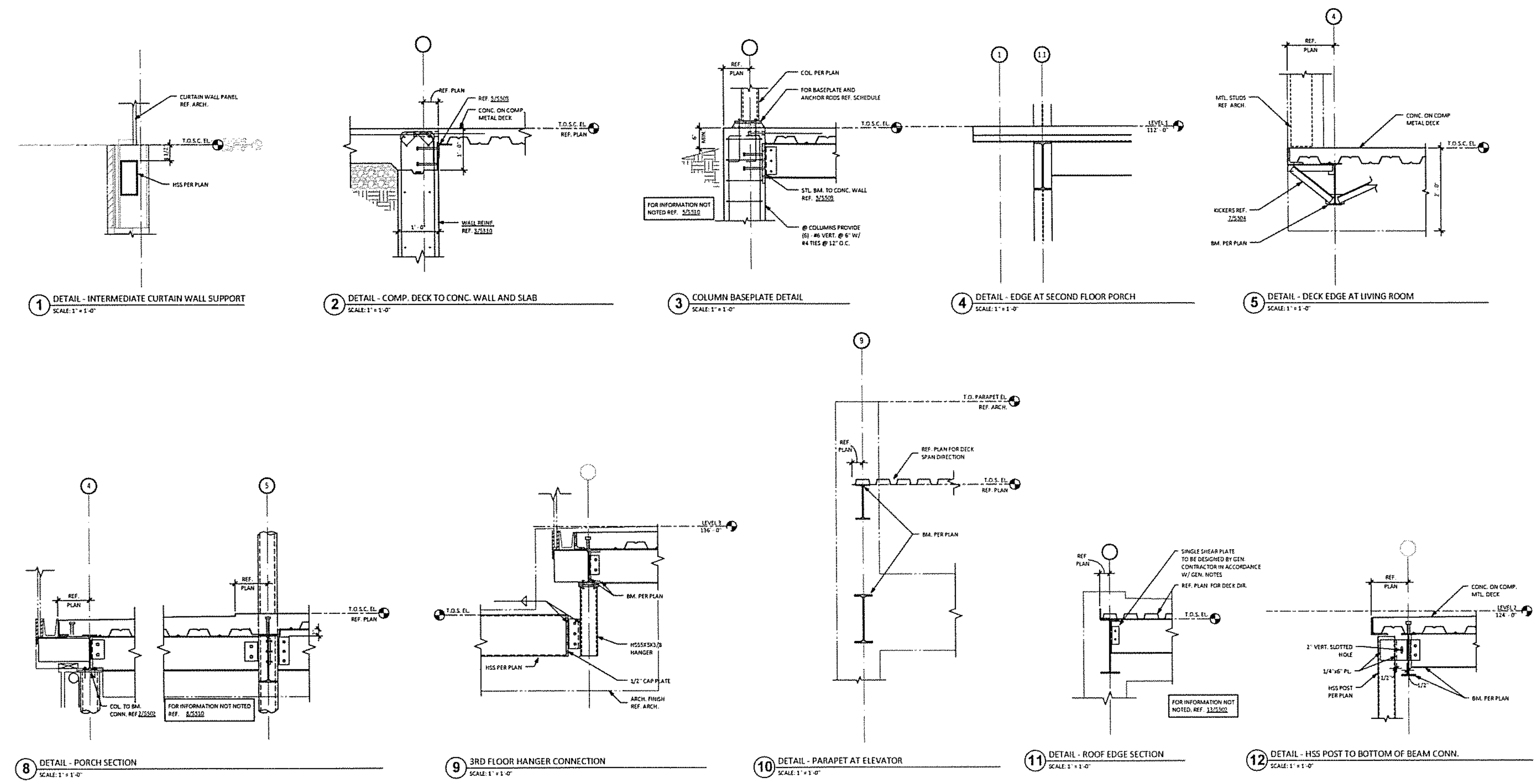
rhotenberry wellen architects
1102 West Texas Avenue
Midland, Texas 79701
432 682 1252
432 682 1257 fax

STATE OF TEXAS
SEN-GIN LIU
101153
LICENSED
PROFESSIONAL ENGINEER

Sen-Gin Liu
04.08.2016

Sheffield Residence
3509 Westlake Drive
Austin, TX

JOB NO.	13067
DRAWINGTITLE	WINDBRACE HSS TYPICAL DETAILS
REVISIONS	△ △ △ △
DATE	04/08/16
DRAWN BY	N.K., J.C.
CHECKED BY	R.L.
SHEET NO.	S531



1" = 30'

rwa rhodenberry wellen architects
1102 West Texas Avenue
Midland, Texas 79701
432.682.1252
432.682.1257 fax

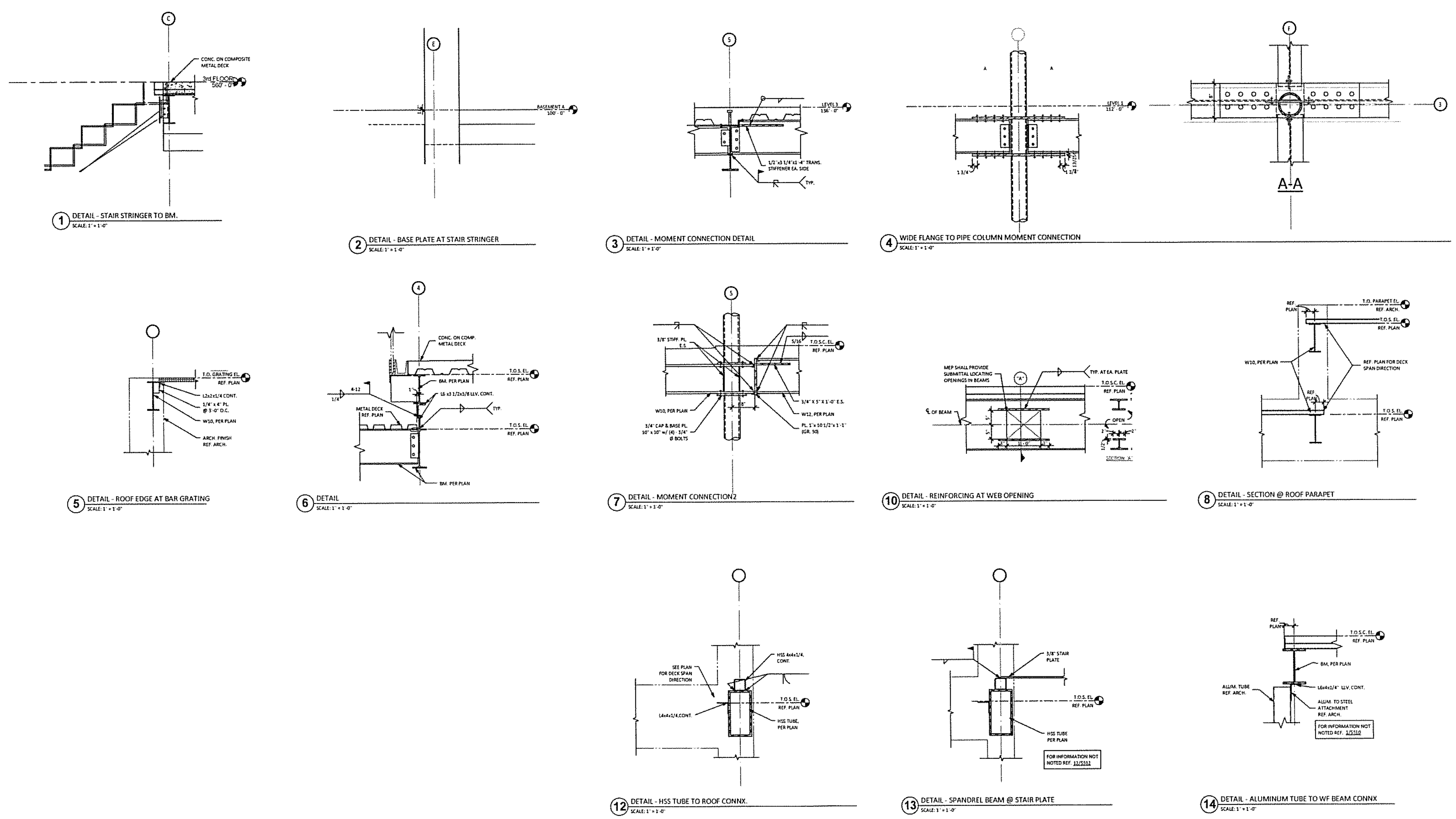
aec Architectural Engineers Collaborative

STATE OF TEXAS
SEN-GIN LIU
101153
LICENSED
PROFESSIONAL ENGINEER

Sen-Gin Liu 04.08.2016

Sheffield Residence
3509 Westlake Drive
Austin, TX

JOB NO. 13007
DRAWING TITLE
STEEL DETAILS
REVISIONS
△
△
△
△
DATE 04/08/16
DRAWN BY N.K., J.C
CHECKED BY R.L
SHEET NO.
S511



1"=30'

rhotenberry wellen architects
1102 West Texas Avenue
Midland, Texas 79701
432.682.1252
432.682.1257 fax

Sheffield Residence
3509 Westlake Drive
Austin, TX

JOB NO 13067

DRAWINGTITLE

STEEL DETAILS

REVISIONS

△
△
△
△

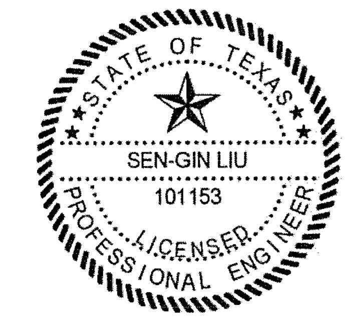
DATE 04/08/16

DRAWN BY N.K., J.C.

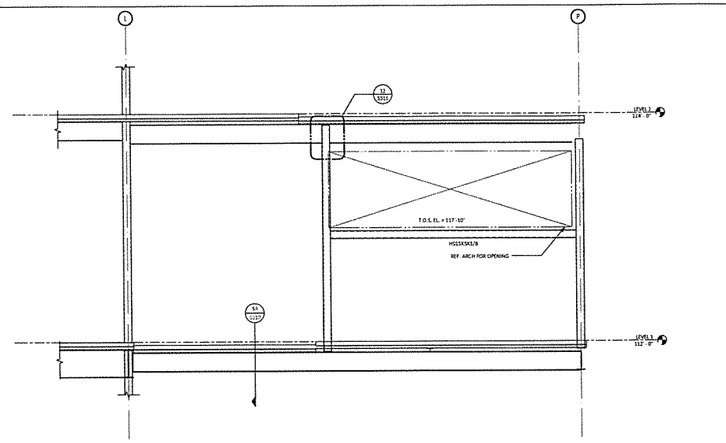
CHECKED BY R.L.

SHEET NO

S512



Sen-Gin Liu
04.08.2016



1 CB-1 ELEVATION
SCALE: 1/2" = 1'-0"

rwa
rhotenberry weiler architects
1102 West Texas Avenue
Midland, Texas 79701
432 682 1257
432 682 1257 fax

aec engineered environments

STATE OF TEXAS
SEN-GIN LIU
101153
LICENSED
PROFESSIONAL ENGINEER

Sen-Gin Liu
04.08.2016

Sheffield Residence
3509 Westlake Drive
Austin, TX

JOB NO. 13057

DRAWING TITLE
CLERESTORY BRACING ELEVATIONS

REVISIONS
△
△
△
△

DATE 04/08/16
DRAWN BY K.K. J.C.
CHECKED BY R.L.
SHEET NO

S513

1 ELEVATION - WB-1
SCALE: 1/4" = 1'-0"

2 ELEVATION - WB-2
SCALE: 1/4" = 1'-0"

3 ELEVATION - WB-3
SCALE: 1/4" = 1'-0"

4 ELEVATION - WB-4
SCALE: 1/4" = 1'-0"

5 ELEVATION - WB-5
SCALE: 1/4" = 1'-0"

7 ELEVATION - WB-7
SCALE: 1/4" = 1'-0"

8 ELEVATION - WB-8
SCALE: 1/4" = 1'-0"

6 ELEVATION - WB-9
SCALE: 1/4" = 1'-0"

1102 West Texas Avenue
Midland, Texas 79701
432 682 1275
432 682 1257 fax

rhotenberry weiler architects

aec Architecture Engineering Consulting

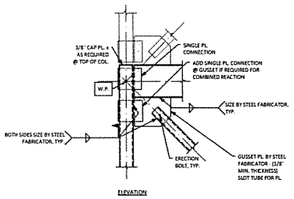
STATE OF TEXAS
SEN-GIN LIU
101153
LICENSED
PROFESSIONAL ENGINEER

Sen-Gin Liu
04.08.2016

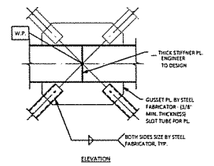
Sheffield Residence
3509 Westlake Drive
Austin, TX

JOB NO. 13057
DRAWING TITLE
WINDBRACE ELEVATIONS
REVISIONS
△
△
△
△
DATE 04/08/16
DRAWN BY N.K., J.C.
CHECKED BY R.L.
SHEET NO.
S530

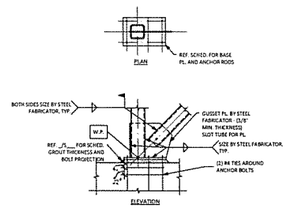
1/16" = 1'



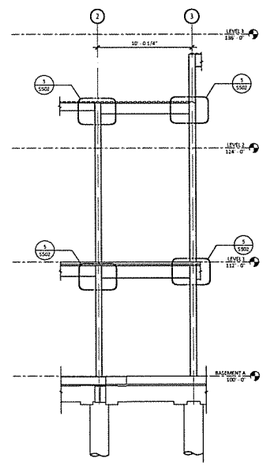
TYPICAL DETAIL
WIDE FLANGE BEAM AND WIND
1 BRACE CONNECTION TO TUBE COLUMN
NO SCALE



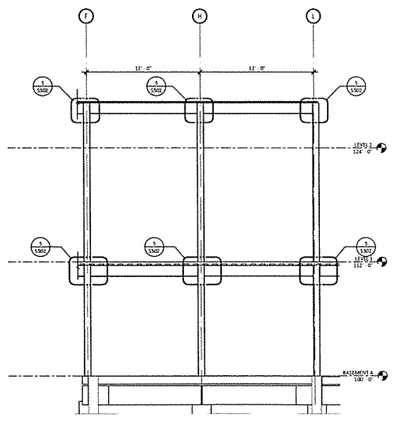
TYPICAL DETAIL
2 WIND BRACE CONNECTION TO BEAM
NO SCALE



TYPICAL DETAIL
3 WIND BRACE CONNECTION TO TUBE COLUMN AND BASE PLATE
NO SCALE



4 ELEVATION - MOMENT FRAME
SCALE: 1/4" = 1'-0"



5 MOMENT FRAME - 2
SCALE: 1/4" = 1'-0"

1/16"=1'

WIND BRACE DESIGN NOTES:

1. Design connections for forces shown on wind brace elevations.
2. If no forces are shown on wind brace elevations, design for the full tensile capacity of the braces according to the Manual of American Institute of Steel Construction, Thirteenth Edition.
3. See welds for forces & eccentricity of C.G. weld & C.G. force.
4. At beam to column connections, size attachment to column for combined gravity load shear plus vertical shear component due to lateral load.
5. Check for Whitmore section buckling, and block shear rupture of gusset plates.
6. Calculations shall be performed and sealed by a Registered Professional Engineer & shall be submitted to the Architect per specifications.
7. Design forces noted as n_E are factored forces in axial tension or compression. V_n are factored vertical shear forces.

1102 West Texas Avenue
Midland, Texas 79701
432 682 1257
432 682 1257 fax

rhotenberry weiler architects

aec Rhotenberry Weiler Architects

STATE OF TEXAS
SEN-GIN LIU
101153
LICENSED
PROFESSIONAL ENGINEER
04.08.2016

Sheffield Residence
3509 Westlake Drive
Austin, TX

JOB NO. 13057
DRAWING TITLE
WINDBRACE HSS
TYPICAL DETAILS
REVISIONS
DATE 04/08/16
DRAWN BY N.K., J.C.
CHECKED BY R.L.
SHEET NO.
S531